



United States  
Department of  
Agriculture

Forest Service

Southern Forest  
Experiment Station

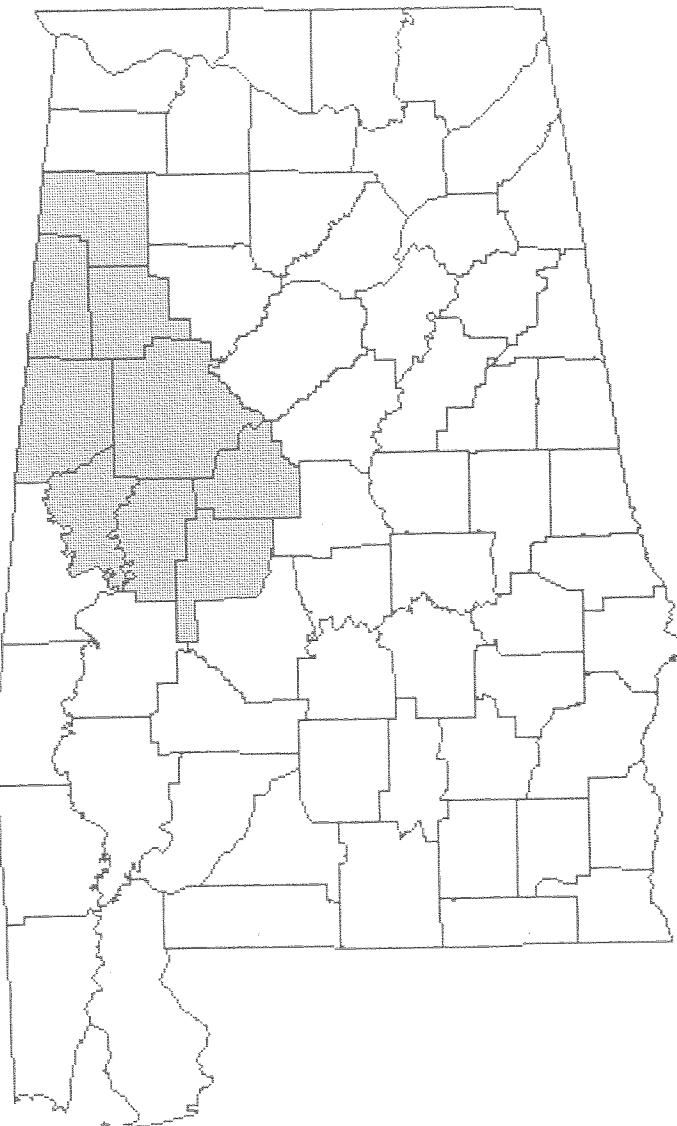
New Orleans,  
Louisiana

Resource Bulletin  
SO-150



# Forest Statistics for West-Central Alabama Counties – 1990

William H. McWilliams, K. L. Duncan, and John S. Vissage



## SUMMARY

The 1990 forest inventory of West-Central Alabama revealed the following:

- Timberland area is 3,357.5 thousand acres, an increase of 3 percent.
- The area of planted pine stands more than doubled. Fifty-eight percent of the region's pine forest is of artificial origin, compared to 29 percent in 1982.
- Live-tree inventory volume totals 3,871.2 million cubic feet, a decrease of 7 percent. The volume of live softwoods decreased by 18 percent.
- The distribution of softwood live-tree volume by diameter class shows large decreases in all but the 16-inch class.
- Hardwood sawtimber volume is 5,812.9 million board feet, an increase of 24 percent.
- Average net growth of live trees did not change significantly since the previous inventory period. The net growth of hardwoods increased by 21 percent. The net growth of softwoods decreased by 13 percent.
- Removals of live trees were 44 percent higher than the previous inventory period.
- Removals now exceed net growth due to heavy cutting of softwoods. The growth-to-removals ratio is 1.1:1.0 for hardwoods and 0.7:1.0 for softwoods.

## FOREWORD

The USDA-Forest Service, Southern Forest Experiment Station, Forest Inventory and Analysis unit (SO-FIA), conducts forest inventories covering the States of Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, Texas, and the island of Puerto Rico.

The SO-FIA forest inventories are part of a nationwide effort originally authorized by the McSweeney-McNary Act of 1928. More recent legislation pertinent to the SO-FIA mission includes the Forest and Rangeland Renewable Resources Planning Act of 1974 and the Forest and Rangeland Renewable Resources Research Act of 1978. The SO-FIA mission is to develop, analyze, and maintain forest resource information that is essential for formulation of forest policies and programs.

## ACKNOWLEDGMENTS

The SO-FIA gratefully acknowledges the cooperation and excellent assistance provided by the Alabama Forestry Commission in collecting field data. Appreciation is also expressed for the cooperation of other public agencies and private landowners in providing access to measurement plots.

The following members of the SO-FIA field staff completed the field measurements:

Leif Anderson	Dave Hattis	Michael Pond
Steven Bergfeld	Mary Bergkamp-Hattis	Randall Prewitt
Mark Burge	Lauri Hogeboom	Lynn Rodrigue
Robert Clement	Tony Holland	Jeff Seefeldt
Susan Crouch	Todd Hoopes	Tim Slone
John Davis	Robert Lewis	Val Urban
Tim Eling	Larry Mahler	
James Flue	Steve Overton	

# CONTENTS

INTRODUCTION.....	1
METHODS.....	1
SAMPLING ERROR.....	1
RESULTS .....	2
Area .....	2
Inventory .....	2
Components of Change .....	3
CONCLUSIONS .....	3
DEFINITION OF TERMS.....	3
CORE TABLES (1-25) <sup>1</sup> .....	5
SUPPLEMENTAL TABLES (26-43).....	15
FIGURES (1-8) .....	27

<sup>1</sup>Core tables are presented in response to the Southern Industrial Forestry Research Council's recommendations. These tables are identical among Forest Inventory and Analysis units in the eastern United States.



Figure I.—Forest survey regions in Alabama.

# Forest Statistics for West-Central Alabama Counties – 1990

William H. McWilliams, K.L. Duncan, and John S. Vissage

## INTRODUCTION

Tabulated results were derived from data obtained during a recent forest inventory of West-Central Alabama (fig. I). Core tables (1 to 25) are compatible among Forest Inventory and Analysis units in the Eastern U.S. Other tables (26 to 43) supplement the information contained in the core tables. Comparisons are made between results of the 1990 inventory and previous inventories conducted in 1982 and 1972.

## METHODS

The SO-FIA uses a two-phase sample of temporary aerial-photo points and a systematic grid of permanent ground plots. The area of forested land was determined by photointerpretation of temporary points and field checks of permanent plots. Field measurements were conducted on a subset of permanent plots spaced 3 miles apart. Tree data were collected on measurement plots that were forested at the time of the current inventory, or were forested at the time of the previous inventory.

Each measurement plot consisted of 10 satellite points spread over an acre of forest. At each point, trees 5.0 inches in diameter at breast height and larger were selected for measurement on a variable-radius plot defined by a 37.5 BAF prism. Trees from 1.0 to 4.9 inches in diameter were tallied on 1/275 acre fixed plots at the first three points and at any remaining points where no trees 5.0 inches in diameter or larger were tallied. If no trees greater than 1.0 inch were tallied at a point, then seedlings were tallied. Several

plot-level measurements relating to timber and non-timber assessment were also collected.

Tree data were used to estimate volumes, basal area, number of trees, and other per-acre variables. Ownership information was obtained for each measurement plot using tax records and other sources. Per acre estimates were expanded using county-level factors derived as part of the forest area determination. Thus, estimates at the county level may not match exactly with known totals for a particular variable.

In order to achieve greater compatibility among Forest Inventory and Analysis units, a modified tree classification system has been in effect since the 1988 inventory of Arkansas. Tree grade 5 is used to designate trees capable of producing at least one 12-foot log or two 8-foot logs in the saw-log portion, but not capable of producing a gradable 12-foot log in the butt 16-foot section. These trees - formerly classed as rough or rotten - are now included in growing stock. Any comparisons with previous estimates of growing stock are based on data that has been reprocessed to account for the change in definition. Because of the revised definition, and to better assess changes in whole-forest conditions; analysis of trends in inventory volume, growth, removals, and mortality will focus on live trees.

## SAMPLING ERROR

The sampling methods were designed to achieve suitable sampling errors for estimates of area and volume at the State level. Sampling error increases as the area or volume considered decreases. The sampling errors presented in

Table I—*Sampling errors<sup>1</sup> for timberland, live trees, growing stock, and sawtimber, West-Central Alabama Counties, 1990*

County	Timberland	Live trees			Growing stock			Sawtimber volume
		Volume	Growth	Removals	Volume	Growth	Removals	
<i>Percent</i>								
Bibb	1.7	8.7	13.2	22.6	8.9	13.0	22.7	11.4
Fayette	2.0	12.8	10.6	25.6	13.0	11.4	25.9	16.4
Greene	2.9	10.5	14.2	33.8	10.9	16.2	34.6	12.9
Hale	1.9	11.2	15.5	30.0	11.3	15.8	30.4	12.8
Lamar	2.3	11.1	19.9	28.5	11.4	17.2	28.4	13.7
Marion	2.6	11.2	12.2	24.5	11.4	12.0	25.1	17.5
Perry	2.3	12.9	15.0	25.1	12.9	14.9	25.6	17.2
Pickens	1.8	8.6	12.5	23.1	8.8	11.5	23.4	11.7
Tuscaloosa	1.7	7.1	9.4	15.6	7.3	9.9	15.8	9.2
All counties	0.7	3.5	4.6	8.0	3.6	4.6	8.2	4.6

<sup>1</sup>By random-sampling formula.

table I, equal to one standard deviation for the sample data, may be used to compute confidence intervals for population estimates. For example, at the 95 percent confidence level, the confidence interval for live-tree volume (in million cubic feet) is:

$$3,871.1 \pm 1.96(0.035 \times 3,871.1) = 3,871.1 \pm 265.6$$

where 1.96 is the number of standard deviations. This confidence interval indicates a 0.95 probability that the range, 3,605.5 to 4,136.7 million cubic feet, will cover the true live-tree inventory volume.

The results are reported for individual counties so that users may combine counties as desired. It is not recommended that individual county data be used in isolation. The user should combine data for as many counties as possible. Sampling error for a combination of counties may be estimated using the following formula:

$$SE_g = \frac{SE_t \sqrt{X_t}}{\sqrt{X_g}}$$

where:

SE = standard error of estimate  
(expressed as a percent)

X = variable of interest  
(area or volume)

g = group of counties to be combined

t = total for the unit.

For example, the estimate of sampling error for live-tree volume in Bibb, Greene, Hale, Perry, Pickens, and Tuscaloosa counties is 4.1 percent. The 95 percent confidence interval for live-tree volume is  $2,860.0 \pm 229.8$  million cubic feet.

## RESULTS

### Area

The physiography of West-Central Alabama is relatively homogeneous, consisting of rolling hills of the East Gulf Coastal Plain. The region's eastern boundary aligns roughly with the Fall Line. The portion of the region to the east of the Fall Line contains more mountainous terrain. Forests cover 3.4 million acres or 77 percent of the land area. All of the forest land is classified as timberland capable of producing industrial wood products. The area of timberland increased slightly, by 3 percent.

Nearly all of the timberland is privately owned (95 percent). Nonindustrial private owners control 68 percent of the region's timberland, or 2.3 million acres. Most of the nonindustrial private timberland is owned by miscellaneous individuals (66 percent). Nonindustrial private timberland increased by 7 percent due to an increase in the area owned by miscellaneous individuals. Forest industry owns 28 percent of the timberland. The area of forest industry timberland is about the same as in 1982. Public timberland

is 5 percent of the region total. Over three-fourths of the public timberland is in the Oakmulgee District of the Talladega National Forest, located southeast of Tuscaloosa.

The region's forest is made up of pine (32 percent), oak-pine (21 percent), and hardwood (47 percent) stands. Forest type is based on the stocking of dominant and codominant trees. Pine forest types include stands where at least half of the stocking is contributed by pines. Loblolly-shortleaf is the predominate pine forest type, accounting for 97 percent of the pine-type timberland. The total area of pine stands is 1.1 million acres, a minor increase of 4 percent; however, there was a large increase in the area of planted pine stands (including direct-seeded stands). The area of planted pine stands more than doubled, and now totals 631.5 thousand acres. Currently, half of the area of nonindustrial private pine stands originated from planting or direct seeding, compared to 76 percent of forest industry's pine stands. There is an additional 181.7 thousand acres with evidence of planting or direct seeding that are classified as oak-pine and hardwood forest types as a result of hardwood stocking. The oak-pine forest type, defined as forests dominated by hardwoods but at least 25 percent stocked with pine, decreased by 4 percent. Hardwood stands include the oak-hickory (70 percent of the hardwood forest) and oak-gum-cypress (30 percent) forest types. The area of hardwood forest types increased by 5 percent. The oak-hickory forest type increased by 9 percent. The oak-gum-cypress type decreased by 4 percent.

### Inventory

The volume of live trees decreased by 7 percent, totaling 3.9 billion cubic feet. (This compares with a 25-percent increase that took place between 1972 and 1982.) A 2 percent increase in hardwood live-tree volume was offset by an 18 percent decrease in softwood live-tree volume. The volume of live trees includes the merchantable sound-wood volume of growing-stock trees, rough trees, and rotten trees. The growing-stock component of live-tree volume - the volume of trees with good management potential - comprises 94 percent of the live-tree volume.

The volume of live-trees is 58 percent hardwood and 42 percent softwood. The most abundant hardwood species are red oak (27 percent of the hardwood volume), white oak (15 percent), sweetgum (16 percent), gums (10 percent), yellow poplar (7 percent), and hickory (7 percent). The softwood inventory is dominated by loblolly pine (70 percent) and shortleaf pine (15 percent).

Shifts in the distribution of live-tree volume by diameter class clarify the decrease that occurred in total inventory volume. For hardwoods, the trend of increases across all diameter classes, which took place between 1972 and 1982, changed between 1982 and 1990. With the exception of the 10-inch class, volumes decreased in the 6- through 12-inch classes. Increases in the 14-inch and larger classes counteracted the decreases in smaller classes. The result was that hardwood inventory volume increased, but at a slower rate than between 1972 and 1982 (a 2-percent increase compared to a 29-percent increase). The most significant factor causing the decrease in overall volume was the very

Table II—Components of annual change in the volume of live trees by inventory period and species group, West-Central Alabama Counties, 1990

Inventory period and species group	Gross growth			Removals	
	Net growth	Mortality	Million cubic feet		
-----					
1972 to 1981:					
Softwoods	109.7	28.2		101.9	
Hardwoods	78.0	26.6		51.5	
Total	187.7	54.8		153.4	
1982 to 1989:					
Softwoods	95.6	24.2		136.6	
Hardwoods	94.5	32.4		84.3	
Total	190.1	56.6		220.9	

sharp declines in softwood volume that occurred in all but the 16-inch class. This was a major reversal of the shifts that took place between 1972 and 1982, when large increases were apparent in the 8- through 14-inch classes.

### Components of Change

Changes in the volume of live trees depend on three components: gross growth, mortality, and removals. Annual estimates of change are based on the period from the year of the previous inventory through the year prior to the present inventory. Gross growth of live trees was 246.7 million cubic feet for the period prior to 1990, remaining about the same as for the period prior to 1982 (table II). Net growth - equal to gross growth minus mortality - also remained level. Net growth was split equally between hardwoods and softwoods. The net growth of hardwoods increased by 21 percent. The net growth of softwoods decreased by 13 percent.

Removals of live trees, 220.9 million cubic feet, was 44 percent higher than for the period prior to 1982. Softwood removals were 62 percent of total removals and increased by 34 percent. Hardwood removals increased by 64 percent.

The ratio of net growth-to-removals is one measure of a forest's capacity to expand in volume. A ratio less than 1.0:1.0 usually indicates decreases in inventory volume. For the current inventory period, the growth-to-removals ratio was 0.9:1.0; decreasing from 1.2:1.0 since the previous inventory period. The ratio was 1.1:1.0 for hardwoods and 0.7:1.0 for softwoods.

### CONCLUSIONS

The forests of West-Central Alabama have been heavily impacted by forest management activity. A high demand for the region's timber has accelerated the cutting of both softwoods and hardwoods. A shift from natural stand management to plantation management began in the 1970's and has intensified during the 1980's. The trend is evident on both forest industry and nonindustrial private timberland. The softwood growth decrease could be

relatively short-lived. Ingrowth from the extensive area of young pine stands will provide a boost to softwood growth as these stands grow to merchantable size. A narrowing of the margin between hardwood growth and removals signals a need for close monitoring of the hardwood resource in the future. The outlook for timber-related resources will depend on future harvest levels, the adequacy of regeneration following harvest, and maintenance of the intensified management level.

### DEFINITION OF TERMS

*Average net annual growth.*—Average net annual volume increase for the inventory period.

*Average annual mortality.*—Average annual sound-wood volume of trees dying from natural causes.

*Average annual removals.*—Average net annual volume of trees removed from the inventory by harvesting, cultural operations (such as timber-stand improvement), land clearing, or changes in land use.

*Commercial species.*—Tree species which normally develop into trees suitable for industrial wood products.

*Forest land.*—Land at least 16.7 percent stocked by forest trees of any size, or formerly having such tree cover, and not currently developed for nonforest use.

*Forest type.*—A classification of forest land based upon the species forming a plurality of live-tree stocking.

*Growing-stock trees.*—Live trees of commercial species. Rough and rotten trees are excluded.

*Growing-stock volume.*—The cubic-foot volume of sound wood in growing-stock trees at least 5.0 inches in diameter at breast height, from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem, or to the point where the central stem breaks into limbs.

*Live trees.*—Commercial and noncommercial tree species of sapling size or larger.

*Live-tree volume.*—The cubic-foot volume of sound wood in live trees at least 5.0 inches in diameter at breast height, from a 1-foot stump to a minimum 4.0-inch top

diameter outside bark of the central stem, or to the point where the central stem breaks into limbs.

*Natural stands.*—Stands with no evidence of artificial regeneration. This includes those established by seed tree regeneration methods.

*Noncommercial species.*—Tree species of typically small size, poor form, or inferior quality which normally do not develop into trees suitable for industrial wood products.

*Planted stands.*—Stands with evidence of planting or direct seeding.

*Poletimber trees.*—Live trees at least 5.0 inches in diameter at breast height, but smaller than sawtimber size.

*Reserved timberland.*—Productive public forest land withdrawn from timber utilization through statute or administrative regulations.

*Rotten trees.*—Live trees of commercial species that do not contain at least one 12-foot log or two 8-foot logs in the saw-log portion, now or prospectively, primarily because of rot.

*Rough trees.*—Live trees of commercial species that do not contain at least one 12-foot log or two 8-foot logs in the saw-log portion, now or prospectively, primarily because of roughness or poor form. Also included are live trees of noncommercial species.

*Saplings.*—Live trees at least 1.0 inches but less than 5.0 inches in diameter at breast height.

*Sawtimber trees.*—Live trees that contain at least one 12-foot log or two 8-foot logs in the saw-log portion, and meet regional specifications for freedom from defect. Softwoods must be at least 9.0 inches in diameter at breast height and hardwoods at least 11.0 inches in diameter at breast height.

*Sawtimber volume.*—Sound-wood volume of the saw-log portion of growing-stock sawtimber trees in board feet, International 1/4-inch rule and in cubic feet.

*Seedlings.*—Live trees less than 1.0 inch in diameter at breast height and greater than one foot tall for hardwoods, greater than six inches tall for softwoods, and greater than one-half inch in diameter at ground level for longleaf pine.

*Select red oaks.*—A classification of several red oak species composed of: cherrybark, Shumard, and northern red oaks.

*Select white oaks.*—A classification of several white oak species composed of: white, swamp chestnut, swamp white, chinkapin, Durand, and bur oaks.

*Site class.*—A classification of forest land in terms of inherent capacity to grow crops of industrial wood.

*Stand-size class.*—A classification of forest land based on the diameter class of live trees on the sampled area; that is, sawtimber, poletimber, or sapling and seedling.

*Timberland.*—Forest land that is producing, or is capable of producing, crops of industrial wood and not withdrawn from timber utilization. Timberland is synonymous with "commercial forest land" in prior reports.

*Tree grade.*—A classification of the volume of the saw-log portion of sawtimber trees, based on: 1) the log grade of the butt log, or 2) ability to produce at least one 12-foot or two 8-foot logs in the upper-section of the saw-log portion.

*Woodland.*—Forest land incapable of yielding crops of industrial wood because of adverse site conditions.

## CORE TABLES 1-25

Table 1—*Area by county and land class, West-Central Alabama Counties, 1990*

County	All land <sup>1</sup>	Forest land			
		Total	Timberland <sup>2</sup>	Woodland <sup>3</sup>	Reserved timberland
----- Thousand acres -----					
Bibb	400.0	346.5	345.9	...	0.6
Fayette	403.0	337.9	337.9	...	...
Greene	403.6	274.1	274.1	...	...
Hale	422.9	252.4	252.4	...	...
Lamar	387.2	326.0	326.0	...	...
Marion	475.8	373.7	373.7	...	...
Perry	459.8	324.2	324.2	...	...
Pickens	569.4	464.1	464.1	...	...
Tuscaloosa	855.2	659.1	659.1	...	...
All counties	4376.8	3358.1	3357.5	...	0.6
					1018.7

<sup>1</sup>From U.S. Bureau of the Census.

<sup>2</sup>Forest land (formerly termed commercial forest land) that is producing or capable of producing at least 20 cubic feet of industrial wood per acre per year. Includes areas which may be inaccessible or inoperable by current standards. Excludes reserved timberland.

<sup>3</sup>Forest land incapable of producing 20 cubic feet of industrial wood per acre per year under natural conditions because of adverse site conditions.

Table 2—*Area of timberland by county and ownership class, West-Central Alabama Counties, 1990*

County	All ownerships	National forest	Misc. federal	State	County and municipal	Forest industry <sup>1</sup>	Farmer	Corporate <sup>2</sup>	Individual <sup>2</sup>
----- Thousand acres -----									
Bibb	345.9	61.4	...	...	...	112.6	41.5	11.9	118.5
Fayette	337.9	...	...	12.3	...	73.7	92.2	12.3	147.4
Greene	274.1	...	5.8	...	...	58.3	134.2	11.7	64.2
Hale	252.4	26.4	...	...	...	56.5	35.3	...	134.2
Lamar	326.0	...	...	6.5	...	58.7	39.1	6.5	215.1
Marion	373.7	...	...	...	6.1	110.3	42.9	24.5	189.9
Perry	324.2	29.9	...	...	...	120.1	42.0	12.0	120.1
Pickens	464.1	...	...	...	...	158.6	76.4	5.9	233.2
Tuscaloosa	659.1	6.1	...	5.7	...	181.7	85.2	107.9	272.6
All counties	3357.5	123.9	5.8	24.5	6.1	930.6	588.7	192.6	1485.3

<sup>1</sup>Includes land leased to forest industry.

<sup>2</sup>Indian land will be classed as corporate or individual as defined by the Bureau of Indian Affairs.

Table 3—*Area of timberland by county and forest type group, West-Central Alabama Counties, 1990*

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
<i>Thousand acres</i>							
Bibb	345.9	...	11.4	89.8	49.2	75.2	112.1
Fayette	337.9	...	...	36.9	67.6	61.4	129.0
Greene	274.1	...	...	35.0	29.2	70.0	52.5
Hale	252.4	2.6	...	56.5	19.4	52.9	52.1
Lamar	326.0	...	...	45.6	13.0	91.3	91.3
Marion	373.7	...	...	79.6	49.0	49.0	6.1
Perry	324.2	6.0	6.9	128.4	21.2	58.7	61.0
Pickens	464.1	...	...	99.9	64.6	82.2	158.6
Tuscaloosa	659.1	...	2.5	51.1	114.8	160.2	79.5
All counties	3357.5	8.6	20.7	622.8	428.0	701.0	1097.6
							478.7

Table 4—*Area of timberland by county and stand-size class, West-Central Alabama Counties, 1990*

County	All classes	Stand-size class		
		Sawtimber	Poletimber	Sapling-seedling
<i>Thousand acres</i>				
Bibb	345.9	107.5	108.5	129.9
Fayette	337.9	92.2	92.2	153.6
Greene	274.1	134.2	46.7	93.3
Hale	252.4	101.5	59.1	91.8
Lamar	326.0	97.8	117.3	110.8
Marion	373.7	85.8	128.7	159.3
Perry	324.2	85.9	105.3	133.0
Pickens	464.1	229.1	111.6	123.4
Tuscaloosa	659.1	271.8	165.9	221.5
All counties	3357.5	1205.6	935.3	1216.6

Table 5—*Area of timberland by county and site class, West-Central Alabama Counties, 1990*

County	All classes	Site class (cubic feet/acre/year)				
		> 165	120-165	85-120	50-85	< 50
<i>Thousand acres</i>						
Bibb	345.9	35.1	139.0	67.0	96.6	8.2
Fayette	337.9	24.6	61.4	92.2	141.3	18.4
Greene	274.1	58.3	116.7	75.8	23.3	...
Hale	252.4	38.0	64.4	106.8	40.6	2.6
Lamar	326.0	...	71.7	149.9	91.3	13.0
Marion	373.7	6.1	36.8	177.7	134.8	18.4
Perry	324.2	36.0	100.7	137.6	49.8	...
Pickens	464.1	52.9	135.1	146.9	129.2	...
Tuscaloosa	659.1	69.4	189.8	238.5	143.2	18.3
All counties	3357.5	320.3	915.7	1192.4	850.2	79.0

Table 6—*Area of timberland by county and stocking classes of growing-stock trees, West-Central Alabama Counties, 1990*

County	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
<i>- Thousand acres -</i>						
Bibb	345.9	26.0	98.9	180.9	40.1	...
Fayette	337.9	36.9	104.4	178.2	18.4	...
Greene	274.1	23.3	58.3	163.3	29.2	...
Hale	252.4	2.6	61.8	152.7	35.3	...
Lamar	326.0	6.5	71.7	189.1	58.7	...
Marion	373.7	6.1	104.1	232.8	30.6	...
Perry	324.2	6.0	88.7	187.5	36.0	6.0
Pickens	464.1	41.1	176.2	193.9	52.9	...
Tuscaloosa	659.1	39.7	188.6	362.6	68.1	...
All counties	3357.5	188.3	952.9	1840.9	369.4	6.0

Table 7—*Area of timberland by forest type and ownership class, West-Central Alabama Counties, 1990*

Forest type <sup>1</sup>	All ownerships	National forest	Other public	Forest industry	Forest industry-leased	Other private
Longleaf-slash pine	29.4	23.4	...	...	...	6.0
Loblolly-shortleaf pine	1050.9	38.5	...	379.6	43.1	589.7
Softwood total	1080.3	61.9	...	379.6	43.1	595.7
Oak-pine	701.0	32.3	12.6	137.9	30.3	487.8
Oak-hickory	1097.6	22.1	18.0	207.2	29.9	820.3
Oak-gum-cypress	478.7	7.6	5.8	90.5	12.0	362.8
Hardwood total	2277.2	62.0	36.4	435.6	72.2	1670.9
All types	3357.5	123.9	36.4	815.2	115.3	2266.6

<sup>1</sup>Forest type is based on species plurality of all live trees. Mixed types that in combination contain a majority of hardwood stocking are hardwood types.

Table 8—*Area of timberland by ownership class and stocking classes of growing-stock trees, West-Central Alabama Counties, 1990*

Ownership class	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
<i>- Thousand acres -</i>						
National forest	123.9	4.9	27.0	87.4	4.5	...
Other public	36.4	...	...	30.3	6.1	...
Forest industry	815.2	69.7	322.8	367.4	55.3	...
Forest industry-leased	115.3	...	30.0	67.5	17.8	...
Other private	2266.6	113.7	573.0	1288.3	285.6	6.0
All ownerships	3357.5	188.3	952.9	1840.9	369.4	6.0

Table 9—Area of timberland by forest type and stand-size class, West-Central Alabama Counties, 1990

Forest type <sup>1</sup>	All classes	Stand-size class		
		Sawtimber	Poletimber	Sapling-seedling
<i>Thousand acres</i>				
Longleaf-slash pine	29.4	23.4	6.0	...
Loblolly-shortleaf pine	1050.9	323.5	333.3	394.1
Softwood total	1080.3	346.9	339.3	394.1
Oak-pine	701.0	289.5	144.6	266.9
Oak-hickory	1097.6	283.6	344.7	469.2
Oak-gum-cypress	478.7	285.7	106.6	86.4
Hardwood total	2277.2	858.8	595.9	822.5
All types	3357.5	1205.6	935.3	1216.6

<sup>1</sup>Forest type is based on species plurality of all live trees. Mixed types that in combination contain a majority of hardwood stocking are hardwood types.

Table 10—Number of live trees on timberland by species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)											
		1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>Thousand trees</i>													
Longleaf-slash pine	15044	6652	3180	1370	1285	919	663	570	270	98	21	15	...
Shortleaf-loblolly pine	475143	181410	140964	70433	36695	20371	12303	6924	3386	1317	597	711	31
Other yellow pines	57121	25533	15649	5053	5909	3016	1231	594	99	27	...	9	...
Eastern hemlock	101	...	...	...	71	...	30	...	...	...	...	...	...
Cypress	524	...	...	133	...	85	120	21	67	25	31	22	19
Other softwoods	19136	14206	3802	283	623	132	...	49	17	13	11	...	...
Total softwoods	567068	227801	163595	77272	44583	24524	14347	8158	3839	1481	661	758	50
Select white oaks	83236	43040	19784	8737	4403	2782	1897	1256	610	294	164	251	19
Select red oaks	10662	4959	1098	1775	448	679	512	322	352	288	89	126	13
Other white oaks	60400	30784	14133	5607	3439	2721	1372	1107	525	382	161	147	23
Other red oaks	215460	133723	33894	15019	13065	8038	4208	3282	1725	1131	578	699	96
Hickory	129524	92381	18762	6855	4599	3096	1454	1063	718	302	144	150	...
Yellow birch	543	543	...	...	...	...	...	...	...	...	...	...	...
Hard maple	3189	2504	563	...	121	...	...	...	...	...	...	...	...
Soft maple	177341	147483	17449	7024	1877	2183	490	309	312	108	54	42	9
Beech	12726	8204	2699	707	458	45	146	91	98	100	48	89	40
Sweetgum	363904	244820	72219	23207	10719	6690	2825	1687	960	347	264	153	14
Tupelo-blackgum	133696	93872	16663	8088	5257	4158	2576	1687	677	284	185	216	33
Ash	17465	10067	4236	1544	468	335	212	259	146	138	30	32	...
Basswood	590	562	...	...	...	...	28	...	...	...	...	...	...
Yellow-poplar	38308	21950	6402	3000	1975	1174	1338	1076	565	378	219	220	12
Other hardwoods	345477	262994	55992	14360	5288	2919	1473	1141	544	324	232	195	15
Total hardwoods	1592522	1097886	263894	95922	52118	34819	18531	13281	7232	4076	2169	2320	274
Noncommercial	213881	161317	30858	14034	4769	2107	476	189	107	25	...	...	...
All species	2373471	1487004	458347	187227	101470	61449	33354	21627	11178	5582	2830	3078	324

Table 11 – Number of growing-stock trees on timberland by species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)											
		1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>Thousand trees</i>													
Longleaf-slash pine	13767	5808	2758	1370	1285	919	652	570	270	98	21	15	...
Shortleaf-loblolly pine	429086	151016	129953	67091	35794	20202	12174	6859	3372	1293	597	711	25
Other yellow pines	50828	21202	14087	4810	5856	2936	1206	594	99	27	...	9	...
Eastern hemlock	101	...	...	...	71	...	30	...	...	...	...	...	...
Cypress	391	...	...	...	...	85	120	21	67	25	31	22	19
Other softwoods	17872	13558	3281	283	571	115	...	23	17	13	11	...	...
Total softwoods	512045	191585	150080	73554	43577	24257	14182	8067	3825	1457	661	758	44
Select white oaks	61262	27122	15184	7835	4063	2749	1870	1233	558	244	164	222	19
Select red oaks	9654	4425	1098	1392	448	679	500	322	303	277	89	110	11
Other white oaks	38814	14717	10696	4524	3239	2601	1107	936	422	351	118	91	13
Other red oaks	164856	97130	24483	13062	12105	7628	3735	2937	1584	1045	528	574	46
Hickory	74866	45602	13647	5018	4335	2856	1283	949	718	231	123	104	...
Hard maple	2599	1984	563	...	52	...	...	...	...	...	...	...	...
Soft maple	97495	77021	11552	4988	1497	1570	306	220	201	67	33	30	9
Beech	6387	3382	1640	541	458	...	90	69	53	76	29	47	...
Sweetgum	255909	161818	53582	18549	9909	6429	2503	1577	851	301	249	133	9
Tupelo-blackgum	72369	43165	9942	6130	4699	3860	1956	1467	627	215	109	180	17
Ash	11577	7849	1211	1214	401	173	177	221	131	138	30	32	...
Basswood	28	...	...	...	...	...	28	...	...	...	...	...	...
Yellow-poplar	36163	20664	5864	2982	1975	1130	1264	1015	516	350	209	190	4
Other hardwoods	193923	143157	31402	9561	4314	2491	1160	849	380	284	152	163	12
Total hardwoods	1025902	648035	180863	75796	47495	32166	15980	11794	6346	3579	1832	1876	140
All species	1537948	839619	330942	149350	91073	56424	30162	19861	10170	5035	2493	2634	183

Table 12 – Volume of growing stock on timberland by species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)									
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>Million cubic feet</i>											
Longleaf-slash pine	70.3	4.2	7.5	11.5	12.6	15.9	10.8	5.3	1.4	1.2	...
Shortleaf-loblolly pine	1356.6	139.8	211.9	246.5	242.4	198.0	137.1	68.2	40.6	68.1	3.9
Other yellow pines	139.2	16.0	41.4	37.4	22.9	15.8	3.1	1.5	...	1.0	...
Eastern hemlock	1.0	...	0.5	...	0.6	...	...	...	...	...	...
Cypress	15.5	...	...	1.7	2.5	0.5	2.0	1.2	1.7	2.2	3.7
Other softwoods	5.2	0.9	2.1	0.8	...	0.4	0.3	0.3	0.3	...	...
Total softwoods	1587.8	161.1	263.4	297.9	281.1	230.5	153.2	76.5	44.1	72.5	7.6
Select white oaks	191.3	18.1	23.9	29.3	34.4	30.4	18.9	10.3	8.1	16.3	1.6
Select red oaks	71.9	2.5	3.0	8.0	10.2	8.2	9.6	14.6	5.4	8.8	1.8
Other white oaks	128.9	9.9	18.8	24.9	17.0	19.1	13.0	14.2	5.1	5.5	1.4
Other red oaks	508.4	33.4	69.4	80.3	69.7	73.0	54.2	48.2	30.2	43.7	6.4
Hickory	156.5	12.3	22.5	27.6	23.0	22.0	23.6	11.6	7.0	6.9	...
Hard maple	0.3	...	0.3	...	...	...	...	...	...	...	...
Soft maple	60.0	13.8	8.0	16.7	4.5	4.6	5.6	2.7	1.3	2.0	1.0
Beech	15.4	1.1	2.0	...	1.4	1.4	1.2	3.3	1.4	3.5	...
Sweetgum	354.1	43.2	57.8	78.5	54.2	43.7	32.6	16.0	15.3	12.1	0.6
Tupelo-blackgum	208.3	18.2	29.6	48.7	35.4	35.1	19.5	6.6	4.6	9.1	1.5
Ash	30.7	2.4	2.4	1.5	3.7	6.2	4.1	6.1	1.9	2.5	...
Basswood	0.6	...	...	...	0.6	...	...	...	...	...	...
Yellow-poplar	153.5	7.0	11.9	13.3	24.6	29.5	19.5	17.0	13.1	16.9	0.6
Other hardwoods	153.0	21.7	22.6	24.3	20.2	19.8	12.1	11.2	7.9	11.2	2.0
Total hardwoods	2033.0	183.7	272.3	353.0	298.8	292.9	213.9	161.7	101.4	138.5	16.9
All species	3620.8	344.7	535.7	650.9	579.9	523.5	367.1	238.2	145.5	210.9	24.5

Table 13 — Volume of growing stock in the saw-log portion of sawtimber<sup>1</sup> trees on timberland by species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)							
		9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>- - - Million cubic feet - - -</i>									
Longleaf-slash pine	53.4	9.2	11.5	14.7	10.3	5.0	1.4	1.2	...
Shortleaf-loblolly pine	879.6	192.5	214.4	180.3	126.0	62.7	37.3	62.8	3.6
Other yellow pines	68.3	29.3	19.9	13.9	2.8	1.5	...	1.0	...
Eastern hemlock	0.5	...	0.5	...	...	...	...	...	...
Cypress	13.7	1.5	1.9	0.4	1.5	1.1	1.6	2.0	3.6
Other softwoods	1.8	0.7	...	0.3	0.2	0.3	0.2	...	...
Total softwoods	1017.2	233.2	248.3	209.7	140.8	70.6	40.5	66.9	7.2
Select white oaks	95.2	...	25.0	24.6	15.4	8.4	6.7	13.8	1.3
Select red oaks	49.8	...	7.7	6.8	8.5	12.7	4.6	7.9	1.7
Other white oaks	60.4	...	12.8	15.3	10.6	11.7	4.2	4.5	1.2
Other red oaks	266.3	...	50.5	59.5	46.9	41.3	25.8	37.0	5.3
Hickory	76.3	...	17.4	17.3	20.0	9.7	5.9	6.0	...
Soft maple	17.3	...	3.4	3.6	4.5	2.2	0.9	1.8	0.9
Beech	9.8	...	0.8	1.3	1.0	2.9	1.1	2.8	...
Sweetgum	140.4	...	38.8	35.0	28.2	13.7	13.4	10.7	0.5
Tupelo-blackgum	88.3	...	24.3	27.5	16.8	5.8	4.2	8.2	1.5
Ash	21.0	...	2.8	5.2	3.7	5.2	1.9	2.3	...
Basswood	0.4	...	0.4	...	...	...	...	...	...
Yellow-poplar	102.0	...	17.2	24.5	17.1	15.1	11.8	15.6	0.6
Other hardwoods	69.3	...	14.9	15.9	10.1	9.6	6.9	9.9	2.0
Total hardwoods	996.4	...	215.9	236.3	182.9	138.3	87.4	120.5	15.0
All species	2013.6	233.2	464.2	446.0	323.7	208.9	128.0	187.4	22.1

<sup>1</sup>That part of the bole of sawtimber trees between a 1-foot stump and saw-log top.

Table 14 — Volume of sawtimber on timberland by species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)							
		9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>- - - Million board feet - - -</i>									
Longleaf-slash pine	317.7	50.4	66.4	89.6	62.3	32.6	8.9	7.5	...
Shortleaf-loblolly pine	5278.0	1030.5	1256.0	1100.2	798.4	403.6	242.8	421.7	24.8
Other yellow pines	376.0	154.6	109.4	80.7	15.4	9.2	...	6.7	...
Eastern hemlock	2.9	...	2.9	...	...	...	...	...	...
Cypress	75.6	8.3	10.0	1.8	9.1	6.1	9.0	11.0	20.4
Other softwoods	8.9	3.4	...	1.6	1.1	1.5	1.3	...	...
Total softwoods	6059.2	1247.2	1444.7	1273.9	886.3	453.0	262.0	447.0	45.2
Select white oaks	550.8	...	136.4	139.7	93.6	49.7	40.0	85.8	5.7
Select red oaks	296.1	...	44.3	37.7	48.1	80.1	27.8	47.7	10.5
Other white oaks	354.2	...	69.4	84.9	63.2	73.8	25.4	29.0	8.4
Other red oaks	1578.1	...	283.8	339.8	277.3	252.5	161.7	231.5	31.4
Hickory	459.7	...	96.9	103.2	121.8	63.8	37.1	36.9	...
Soft maple	96.7	...	19.2	19.9	26.2	12.6	4.9	9.7	4.2
Beech	59.2	...	3.9	6.8	5.7	18.5	6.0	18.3	...
Sweetgum	833.5	...	220.9	204.1	168.3	86.6	82.8	67.6	3.1
Tupelo-blackgum	450.8	...	120.2	144.3	86.1	29.0	23.3	41.3	6.6
Ash	126.5	...	16.2	31.5	20.5	33.3	11.3	13.6	...
Basswood	2.1	...	2.1	...	...	...	...	...	...
Yellow-poplar	601.3	...	97.4	146.4	100.7	89.3	71.2	92.4	3.8
Other hardwoods	403.9	...	83.7	86.6	58.1	57.4	42.3	62.3	13.5
Total hardwoods	5812.9	...	1194.3	1344.9	1069.7	846.6	533.8	736.2	87.3
All species	11872.1	1247.2	2639.0	2618.8	1956.0	1299.6	795.8	1183.2	132.5

Table 15—Volume of growing stock and sawtimber on timberland by county and species group, West-Central Alabama Counties, 1990.

County	Growing stock						Sawtimber					
	All species	Softwood			Hardwood			All species	Softwood			Hardwood
		Pine	Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>		Pine	Planted	Natural	Other
<i>Million cubic feet</i>												
Bibb	330.2	36.4	139.3	0.4	59.7	94.3	1152.2	84.8	617.2	1.6	156.5	292.1
Fayette	291.9	4.0	104.8	0.3	88.0	94.7	786.0	...	292.4	1.4	213.2	279.0
Greene	353.5	35.8	83.1	6.0	108.0	120.6	1425.5	167.3	418.6	27.5	337.5	474.6
Hale	235.2	26.4	72.4	0.1	57.5	78.7	743.5	54.3	330.1	...	118.5	240.6
Lamar	357.2	16.8	77.2	6.4	136.5	120.3	974.8	40.2	274.9	29.1	270.8	359.8
Marion	289.1	46.0	63.8	1.2	39.9	138.2	741.8	135.7	203.2	2.9	101.9	298.1
Perry	278.3	74.5	66.0	4.8	67.5	65.5	909.0	168.7	315.6	21.2	191.3	212.3
Pickens	697.9	158.4	207.7	2.2	164.7	164.9	2522.4	606.3	949.5	3.8	468.4	494.4
Tuscaloosa	787.6	50.0	303.4	0.3	195.2	238.7	2616.7	143.7	1169.3	...	515.2	788.5
All counties	3620.8	448.4	1117.8	21.7	917.1	1115.9	11872.1	1401.0	4570.8	87.4	2373.3	3439.5

<sup>1</sup>Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

<sup>2</sup>Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 16—Volume of timber on timberland by class of timber and species group, West-Central Alabama Counties, 1990

Class of timber	All species	Softwood			Hardwood		
		Pine	Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>
<i>Million cubic feet</i>							
Sawtimber trees:							
Saw-log portion	2013.6	241.7	759.5	16.0	414.8	581.6	
Upper-stem portion	373.9	40.2	103.8	2.2	96.0	131.7	
Total	2387.4	281.8	863.4	18.2	510.8	713.3	
Poletimber trees	1233.4	166.5	254.4	3.5	406.3	402.6	
All growing-stock trees	3620.8	448.4	1117.8	21.7	917.1	1115.9	
Rough trees:							
Sawtimber size	88.3	1.2	4.7	0.1	31.3	51.1	
Poletimber size	124.7	2.9	7.2	0.5	31.0	83.1	
Total	212.9	4.1	11.8	0.5	62.3	134.2	
Rotten trees:							
Sawtimber size	33.6	...	...	0.3	18.5	14.8	
Poletimber size	3.8	...	0.3	...	2.3	1.2	
Total	37.4	...	0.3	0.3	20.8	16.0	
Salvable dead trees:							
Sawtimber size	15.0	3.6	7.5	0.3	1.0	2.5	
Poletimber size	6.9	1.1	3.1	0.8	0.6	1.3	
Total	21.9	4.7	10.6	1.1	1.7	3.8	
All classes	3893.0	457.1	1140.5	23.6	1001.9	1269.8	

<sup>1</sup>Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

<sup>2</sup>Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 17—Volume of live trees and growing stock on timberland by ownership class and species group, West-Central Alabama Counties, 1990

Ownership class	Live trees						Growing stock					
	Softwood			Hardwood			Softwood			Hardwood		
	All species	Pine		Soft <sup>1</sup>	Hard <sup>2</sup>	All species	Pine			Soft <sup>1</sup>	Hard <sup>2</sup>	
<i>Million cubic feet</i>												
National forest	206.2	7.9	108.6	0.2	48.5	41.0	194.6	7.8	108.1	0.1	46.0	32.6
Other public	36.0	...	8.7	0.3	11.5	15.6	33.1	...	8.7	...	10.6	13.8
Forest industry	822.0	218.3	203.0	3.6	181.7	215.4	780.7	215.6	201.2	3.6	169.1	191.1
Forest industry-leased	119.6	29.5	35.4	...	20.3	34.4	110.1	29.5	34.5	...	17.4	28.7
Other private	2687.2	196.8	774.2	18.4	738.2	959.7	2502.3	195.5	765.2	17.9	674.1	849.7
All ownerships	3871.1	452.4	1129.9	22.5	1000.2	1266.0	3620.8	448.4	1117.8	21.7	917.1	1115.9

<sup>1</sup>Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

<sup>2</sup>Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 18—Average net annual growth of growing stock and sawtimber on timberland by county and species group, West-Central Alabama Counties, 1990

County	Growing stock						Sawtimber					
	Softwood			Hardwood			Softwood			Hardwood		
	All species	Pine		Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>	All species	Pine		Soft <sup>1</sup>
<i>Million cubic feet</i>												
Bibb	16.9	1.5	8.8	...	2.7	4.0	65.9	2.5	43.5	0.2	7.3	12.4
Fayette	15.8	0.9	4.4	...	5.0	5.5	50.0	1.8	16.7	...	13.8	17.7
Greene	16.4	2.1	3.2	0.5	4.5	6.2	63.4	11.2	14.6	1.7	11.6	24.3
Hale	11.9	1.5	3.8	...	2.7	3.9	46.2	1.3	21.5	...	7.9	15.5
Lamar	18.1	1.2	5.1	0.1	5.6	6.0	61.4	5.2	21.8	1.6	12.3	20.5
Marion	18.1	2.1	5.9	...	2.1	8.0	66.1	12.2	26.7	0.1	3.5	23.6
Perry	20.2	7.0	4.8	0.3	3.9	4.2	73.5	15.8	23.7	1.0	15.3	17.7
Pickens	38.1	8.8	11.5	...	8.1	9.7	161.3	36.5	65.0	-0.1	31.0	28.8
Tuscaloosa	35.3	5.9	17.2	-0.3	4.7	7.8	171.4	21.0	93.7	-0.3	18.5	38.6
All counties	191.0	31.2	64.7	0.6	39.2	55.3	759.1	107.5	327.0	4.2	121.2	199.1

<sup>1</sup>Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

<sup>2</sup>Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 19—Average annual removals of growing stock and sawtimber on timberland by county and species group, West-Central Alabama Counties, 1990

County	Growing stock						Sawtimber					
	Softwood			Hardwood			Softwood			Hardwood		
	All species	Pine		Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>	All species	Pine		Soft <sup>1</sup>
<i>Million cubic feet</i>												
Bibb	18.5	...	13.1	...	2.8	2.6	65.7	...	57.6	...	2.0	6.1
Fayette	25.7	2.6	7.7	...	7.5	7.8	84.2	7.6	34.3	...	19.4	22.8
Greene	11.5	3.1	5.4	...	1.2	1.9	51.7	15.1	25.2	...	4.2	7.1
Hale	18.5	...	10.0	...	5.3	3.2	70.8	...	51.0	...	11.2	8.5
Lamar	13.3	1.2	6.0	...	2.9	3.3	37.5	2.4	18.8	...	7.4	8.9
Marion	18.7	1.9	11.4	...	0.5	4.9	67.2	7.3	44.1	...	1.4	14.5
Perry	21.8	0.9	13.6	...	3.2	4.2	81.5	2.1	62.8	...	4.0	12.5
Pickens	27.4	5.0	13.0	...	4.0	5.4	87.3	9.2	55.3	...	9.9	12.8
Tuscaloosa	59.7	7.7	33.0	...	5.7	13.3	219.1	16.9	134.8	...	19.6	47.8
All counties	215.3	22.3	113.2	...	33.2	46.5	764.9	60.7	484.0	...	79.1	141.1

<sup>1</sup>Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

<sup>2</sup>Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 20—*Average net annual growth and average annual removals of growing stock on timberland by species, West-Central Alabama Counties, 1990*

Species	Growth	Removals
- - - Million cubic feet - - -		
Yellow pines	95.9	135.6
Other softwoods	0.6	...
Total softwoods	96.5	135.6
Select white-red oaks	12.6	8.8
Other white-red oaks	32.8	28.5
Hickory	6.3	7.0
Sweetgum	15.0	16.8
Ash-walnut-black cherry	2.3	1.1
Yellow-poplar	8.0	3.8
Other hardwoods	17.4	13.7
Total hardwoods	94.5	79.7
All species	191.0	215.3

Table 21—*Average net annual growth and average annual removals of sawtimber on timberland by species, West-Central Alabama Counties, 1990*

Species	Growth	Removals
- - - Million board feet - - -		
Yellow pines	434.5	544.7
Other softwoods	4.2	...
Total softwoods	438.8	544.7
Select white-red oaks	52.0	29.5
Other white-red oaks	118.5	88.5
Hickory	18.2	18.8
Sweetgum	38.8	38.8
Ash-walnut-black cherry	7.8	2.3
Yellow-poplar	39.6	14.3
Other hardwoods	45.3	28.1
Total hardwoods	320.3	220.3
All species	759.1	764.9

Table 22—*Average annual mortality of growing stock and sawtimber on timberland by species, West-Central Alabama Counties, 1990*

Species	Growing stock	Sawtimber
- - - Million cubic feet - - - Million board feet - - -		
Yellow pines	21.3	63.9
Other softwoods	0.3	0.3
Total softwoods	21.6	64.2
Select white-red oaks	1.9	5.0
Other white-red oaks	7.3	22.4
Hickory	1.6	5.2
Sweetgum	6.2	13.3
Ash-walnut-black cherry	0.4	0.7
Yellow-poplar	1.7	4.9
Other hardwoods	4.2	8.3
Total hardwoods	23.4	59.8
All species	45.0	124.1

Table 23— Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, West-Central Alabama Counties, 1990

Ownership class	All species	Growth					Removals					
		Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine	Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>	Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>
<i>Million cubic feet</i>												
National forest	6.4	0.6	3.1	...	1.6	1.1	5.4	...	5.0	...	0.3	0.1
Other public	1.2	...	0.2	...	0.4	0.5	2.3	...	2.1	...	...	0.2
Forest industry	48.1	15.9	15.2	...	7.8	9.2	74.4	7.3	42.3	...	8.8	16.0
Forest industry-leased	6.1	1.7	1.2	...	1.1	2.1	10.2	1.8	4.5	...	1.5	2.3
Other private	129.2	13.0	45.0	0.6	28.3	42.3	122.9	13.2	59.3	...	22.5	27.9
All ownerships	191.0	31.2	64.7	0.6	39.2	55.3	215.3	22.3	113.2	...	33.2	46.5

<sup>1</sup>Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

<sup>2</sup>Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 24— Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group, West-Central Alabama Counties, 1990

Ownership class	All species	Growth					Removals					
		Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine	Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>	Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>
<i>Million board feet</i>												
National forest	30.4	0.5	18.2	...	7.3	4.4	25.5	...	24.3	...	0.9	0.3
Other public	3.4	...	1.8	...	1.3	0.3	10.6	...	10.6	...	...	...
Forest industry	195.1	52.1	71.7	0.1	30.6	40.7	281.1	15.6	188.1	...	20.9	56.5
Forest industry-leased	21.7	3.4	5.0	...	4.7	8.6	32.0	3.0	22.5	...	2.2	4.4
Other private	508.5	51.5	230.3	4.1	77.3	145.2	415.7	42.0	238.5	...	55.2	80.0
All ownerships	759.1	107.5	327.0	4.2	121.2	199.1	764.9	60.7	484.0	...	79.1	141.1

<sup>1</sup>Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

<sup>2</sup>Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 25— Volume of sawtimber on timberland by species and tree grade, West-Central Alabama Counties, 1990

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	<i>Million board feet</i>	
							...	...
Yellow pines	5971.8	1596.9	1080.8	3196.9	...	97.2		
Cypress	75.6	29.3	14.6	31.7	...	...		
Redcedar	8.9	8.9	...	...	...	...		
Other softwoods	2.9	...	...	2.9	...	...		
Total softwoods	6059.2	1635.1	1095.4	3231.5	...	97.2		
Select white-red oaks	846.9	150.4	199.1	321.0	141.8	34.6		
Other white-red oaks	1932.3	155.4	294.9	696.5	650.0	135.5		
Hickory	459.7	42.6	86.7	213.6	92.8	23.9		
Sweetgum	833.5	98.2	156.9	430.9	108.6	38.8		
Tupelo and blackgum	450.8	22.4	121.5	236.1	21.0	49.7		
Ash-walnut-black cherry	128.5	18.0	29.6	60.9	13.2	6.8		
Yellow-poplar	601.3	53.3	119.0	192.3	192.1	44.5		
Other hardwoods	560.0	47.4	77.1	212.1	160.5	62.9		
Total hardwoods	5812.9	587.8	1084.8	2363.5	1380.0	396.7		
All species	11872.1	2222.9	2180.2	5594.9	1380.0	493.9		

Supplemental Tables 26-43

Table 26—*Area of timberland by stand age, forest type group and type of regeneration, West-Central Alabama Counties, 1990*

Stand age class	Pine		Oak-pine		Other hardwood types	
	Artificial	Natural	Artificial	Natural	Artificial	Natural
- Thousand acres -						
1-10	275.2	25.0	64.0	26.4	47.6	73.9
11-20	119.5	18.1	11.7	...	...	5.9
21-30	80.6	5.7	5.7	...	...	...
31-40	65.8	41.5	11.5	5.9	...	...
41-50	11.7	7.1	...	...	5.8	5.7
>50	5.9	2.3	...	19.4	...	9.7
Mixed	72.7	349.0	23.6	532.8	11.8	1415.9
Total	631.5	448.8	116.5	584.5	65.2	1511.1

Table 27—*Volume of softwood growing stock on timberland by forest type group, West-Central Alabama Counties, 1990*

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
- Million cubic feet -							
Bibb	176.1	...	16.9	34.9	46.1	58.0	18.7
Fayette	109.1	...	...	4.0	73.1	19.0	12.4
Greene	124.9	...	...	20.8	45.8	35.6	15.2
Hale	99.0	2.5	...	23.9	18.4	42.0	7.0
Lamar	100.4	...	...	16.8	9.8	54.9	8.6
Marion	111.0	...	...	45.3	29.9	14.1	21.7
Perry	145.2	5.2	11.2	64.6	13.9	30.0	12.7
Pickens	368.3	...	...	154.2	105.5	70.3	36.8
Tuscaloosa	353.7	...	4.5	43.6	158.8	110.2	34.7
All counties	1587.8	7.7	32.6	408.1	501.4	434.1	167.9
							36.1

Table 28—*Volume of hardwood growing stock on timberland by forest type group, West-Central Alabama Counties, 1990*

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
- Million cubic feet -							
Bibb	154.1	...	1.0	9.5	12.9	34.1	77.5
Fayette	182.7	...	...	1.8	14.0	23.3	99.0
Greene	228.7	...	...	3.8	9.6	30.4	56.6
Hale	136.2	...	...	6.2	2.9	24.9	20.0
Lamar	256.8	...	...	0.9	1.1	47.3	74.5
Marion	178.1	...	...	2.3	10.4	13.6	143.9
Perry	133.0	0.5	0.6	9.3	2.5	24.8	45.9
Pickens	329.6	...	...	24.2	23.9	56.4	113.7
Tuscaloosa	433.8	...	0.8	1.2	21.4	76.2	197.1
All counties	2033.0	0.5	2.4	59.1	98.8	331.0	828.0
							713.2

Table 29—Volume of softwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type group, West-Central Alabama Counties, 1990

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
----- Million cubic feet -----							
Bibb	117.9	...	13.8	15.4	31.0	43.8	12.4
Fayette	54.7	...	...	...	33.8	13.0	7.3
Greene	95.4	...	...	15.4	34.3	25.6	13.4
Hale	67.0	1.7	...	9.0	13.0	33.1	5.3
Lamar	60.0	...	...	7.4	3.1	35.6	4.8
Marion	59.5	...	...	22.4	17.2	8.3	11.6
Perry	86.0	2.9	8.4	23.4	8.6	24.7	10.9
Pickens	254.5	...	...	100.8	73.9	52.6	25.9
Tuscaloosa	222.4	...	3.4	22.0	92.4	78.0	24.7
All counties	1017.2	4.6	25.6	215.9	307.4	314.6	116.4
							32.7

Table 30—Volume of hardwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type group, West-Central Alabama Counties, 1990

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
----- Million cubic feet -----							
Bibb	76.6	...	0.1	5.5	4.9	18.4	34.9
Fayette	86.5	...	...	1.4	4.9	6.5	48.5
Greene	133.6	...	...	2.4	2.0	10.9	27.7
Hale	64.1	...	...	1.7	1.3	10.7	11.0
Lamar	113.6	...	...	0.8	0.5	25.2	29.7
Marion	66.9	...	...	1.2	3.0	2.8	57.4
Perry	69.2	...	0.2	1.9	0.4	13.7	23.0
Pickens	165.5	...	...	8.9	9.1	35.2	48.3
Tuscaloosa	220.4	...	0.4	0.5	6.5	35.2	100.5
All counties	996.4	...	0.7	24.2	32.8	158.6	380.9
							399.2

Table 31—Volume of timber on timberland by county, class of timber and species group, West-Central Alabama Counties, 1990

County	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
----- Million cubic feet -----							
Bibb	359.7	176.1	154.1	2.5	22.1	...	5.0
Fayette	313.1	109.1	182.7	1.5	17.9	...	1.8
Greene	379.4	124.9	228.7	1.7	20.0	...	4.3
Hale	258.7	99.0	136.2	1.0	18.1	...	4.3
Lamar	385.8	100.4	256.8	1.6	23.3	0.6	3.1
Marion	312.1	111.0	178.1	1.4	17.9	...	3.7
Perry	296.0	145.2	133.0	0.8	13.6	...	3.4
Pickens	730.4	368.3	329.6	4.5	23.6	...	4.4
Tuscaloosa	835.8	353.7	433.8	1.6	39.9	...	6.8
All counties	3871.1	1587.8	2033.0	16.5	196.5	0.6	36.8

Table 32 – Number of live trees on timberland by detailed species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)											
		1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>----- Thousand trees -----</i>													
Longleaf pine	14668	6652	3180	1278	1076	868	663	547	270	98	21	15	...
Slash pine	376	...	...	92	210	51	...	23	...	...	...	...	...
Shortleaf pine	59912	23441	14169	8041	5819	4093	2345	1270	492	162	33	46	...
Loblolly pine	415231	157969	126795	62392	30877	16279	9958	5654	2894	1155	564	665	31
Virginia pine	57023	25533	15649	5053	5909	2981	1231	553	99	14	...	...	...
Spruce pine	98	...	...	...	...	35	...	41	...	13	...	9	...
Redcedar	19136	14206	3802	283	623	132	...	49	17	13	11	...	...
Hemlock-spruce	101	...	...	...	71	...	30	...	...	...	...	...	...
Cypress	524	...	...	133	...	85	120	21	67	25	31	22	19
Total softwoods	567068	227801	163595	77272	44583	24524	14347	8158	3839	1481	661	758	50
Select white oaks	83236	43040	19784	8737	4403	2782	1897	1256	610	294	164	251	19
Select red oaks	10662	4959	1098	1775	448	679	512	322	352	288	89	126	13
Other white oaks	60400	30784	14133	5607	3439	2721	1372	1107	525	382	161	147	23
Other red oaks	215460	133723	33894	15019	13065	8038	4208	3282	1725	1131	578	699	96
Sweet pecan	1295	1295	...	...	...	...	...	...	...	...	...	...	...
Water hickory	61	...	...	...	55	...	...	...	...	...	...	6	...
Other hickories	128168	91086	18762	6855	4545	3096	1454	1063	718	302	144	144	...
Persimmon	22162	17257	4050	748	86	...	...	22	...	...	...	...	...
Hard maple	3189	2504	563	...	121	...	...	...	...	...	...	...	...
Soft maple	175581	145822	17449	7024	1877	2110	490	309	296	108	45	42	9
Boxelder	1760	1661	...	...	73	...	...	16	...	9	...	...	...
Beech	12726	8204	2699	707	458	45	146	91	98	100	48	89	40
Sweetgum	363904	244820	72219	23207	10719	6690	2825	1687	960	347	264	153	14
Blackgum	112319	87574	12975	4279	2755	2047	1194	822	344	89	96	144	...
Other gums/tupelos	21377	6299	3689	3809	2502	2111	1382	865	332	196	89	71	33
White ash	3922	1640	1942	174	70	42	...	24	17	13	...	...	...
Other ashes	13544	8427	2294	1371	397	293	212	235	129	125	30	32	...
Sycamore	177	...	...	...	...	38	26	...	47	27	11	20	8
Basswood	590	562	...	...	...	...	28	...	...	...	...	...	...
Yellow-poplar	38308	21950	6402	3000	1975	1174	1338	1076	565	378	219	220	12
Magnolia	2002	1084	521	348	...	36	...	...	...	14	...	...	...
Sweetbay	17377	10650	539	2594	1590	964	481	284	154	78	34	5	3
Willow	560	...	...	...	273	180	...	107	...	...	...	...	...
Black cherry	34705	27579	5449	774	562	301	31	...	...	...	...	8	...
American elm	5325	4364	...	350	266	75	79	107	...	25	31	28	...
Other elms	29859	22008	5080	1428	661	204	313	125	29	...	11	...	...
River birch	5656	2253	1133	988	266	417	229	151	78	66	21	54	...
Other birches	543	543	...	...	...	...	...	...	...	...	...	...	...
Hackberry	5991	2719	535	666	602	499	195	305	170	114	102	80	4
Black locust	211	...	...	127	84	...	...	...	...	...	...	...	...
Other locusts	808	...	539	116	64	...	33	40	17	...	...	...	...
Sassafras	15318	12958	1161	1109	60	...	31	...	...	...	...	...	...
Dogwood	186253	147446	34020	4329	409	48	...	...	...	...	...	...	...
Holly	10774	9173	1345	56	87	113	...	...	...	...	...	...	...
Other commercial	8298	5502	1622	728	277	42	55	...	49	...	23	...	...
Total hardwoods	1592522	1097886	263894	95922	52118	34819	18531	13281	7232	4076	2169	2320	274
Noncommercial	213881	161317	30858	14034	4769	2107	476	189	107	25	...	...	...
All species	2373471	1487004	458347	187227	101470	61449	33354	21627	11178	5582	2830	3078	324

Table 33—Number of growing-stock trees on timberland by detailed species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)									
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>----- Thousand trees -----</i>											
Longleaf pine	4825	1278	1076	868	652	547	270	98	21	15	...
Slash pine	376	92	210	51	...	23	...	...	...	...	...
Shortleaf pine	21500	7593	5533	4051	2319	1270	492	162	33	46	...
Loblolly pine	126617	59498	30261	16151	9855	5589	2879	1130	564	665	25
Virginia pine	15441	4810	5856	2902	1206	553	99	14	...	...	...
Spruce pine	98	...	...	35	...	41	...	13	...	9	...
Redcedar	1033	283	571	115	...	23	17	13	11	...	...
Hemlock-spruce	101	...	71	...	30	...	...	...	...	...	...
Cypress	391	...	...	85	120	21	67	25	31	22	19
Total softwoods	170381	73554	43577	24257	14182	8067	3825	1457	661	758	44
Select white oaks	18956	7835	4063	2749	1870	1233	558	244	164	222	19
Select red oaks	4131	1392	448	679	500	322	303	277	89	110	11
Other white oaks	13402	4524	3239	2601	1107	936	422	351	118	91	13
Other red oaks	43243	13062	12105	7628	3735	2937	1584	1045	528	574	46
Other hickories	15618	5018	4335	2856	1283	949	718	231	123	104	...
Persimmon	661	614	25	...	...	22	...	...	...	...	...
Hard maple	52	...	52	...	...	...	...	...	...	...	...
Soft maple	8862	4988	1497	1535	306	220	185	67	24	30	9
Boxelder	61	...	...	35	...	...	16	...	9	...	...
Beech	1365	541	458	...	90	69	53	76	29	47	...
Sweetgum	40509	18549	9909	6429	2503	1577	851	301	249	133	9
Blackgum	9388	3091	2334	1828	891	690	310	63	63	116	...
Other gums/tupelos	9873	3039	2365	2032	1065	777	317	152	45	64	17
White ash	339	174	70	42	...	24	17	13	...	...	...
Other ashes	2178	1041	330	131	177	198	115	125	30	32	...
Sycamore	177	...	...	38	26	...	47	27	11	20	8
Basswood	28	...	...	...	28	...	...	...	...	...	...
Yellow-poplar	9635	2982	1975	1130	1264	1015	516	350	209	190	4
Magnolia	14	...	...	...	...	...	...	14	...	...	...
Sweetbay	4967	2192	1464	735	290	164	54	64	...	3	...
Willow	560	...	273	180	...	107	...	...	...	...	...
Black cherry	1501	606	562	301	31	...	...	...	...	...	...
American elm	621	263	126	75	53	40	...	25	20	20	...
Other elms	2218	1042	545	204	281	106	29	...	11	...	...
River birch	2226	988	266	417	229	151	62	54	21	39	...
Hackberry	2389	561	602	428	162	218	154	100	79	80	4
Black locust	211	127	84	...	...	...	...	...	...	...	...
Other locusts	153	...	64	...	33	40	17	...	...	...	...
Sassafras	841	841	...	...	...	...	...	...	...	...	...
Dogwood	1964	1782	181	...	...	...	...	...	...	...	...
Holly	229	56	60	113	...	...	...	...	...	...	...
Other commercial	631	488	60	...	55	...	17	...	11	...	...
Total hardwoods	197005	75796	47495	32166	15980	11794	6346	3579	1832	1876	140
All species	367386	149350	91073	56424	30162	19861	10170	5035	2493	2634	183

Table 34 – Volume of growing-stock on timberland by detailed species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)									
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>Million cubic feet</i>											
Longleaf pine	67.8	4.0	6.4	10.8	12.6	15.3	10.8	5.3	1.4	1.2	...
Slash pine	2.6	0.2	1.1	0.6	...	0.6	...	...	...	...	...
Shortleaf pine	241.9	22.6	38.9	53.1	48.6	42.0	22.1	8.5	2.3	3.9	...
Loblolly pine	1114.7	117.3	173.0	193.4	193.8	156.1	115.0	59.7	38.4	64.2	3.9
Virginia pine	135.3	16.0	41.4	37.1	22.9	14.2	3.1	0.6	...	...	...
Spruce pine	3.9	...	...	0.4	...	1.5	...	0.9	...	1.0	...
Redcedar	5.2	0.9	2.1	0.8	...	0.4	0.3	0.3	0.3	...	...
Hemlock-spruce	1.0	...	0.5	...	0.6	...	...	...	...	...	...
Cypress	15.5	...	...	1.7	2.5	0.5	2.0	1.2	1.7	2.2	3.7
Total softwoods	1587.8	161.1	263.4	297.9	281.1	230.5	153.2	76.5	44.1	72.5	7.6
Select white oaks	191.3	18.1	23.9	29.3	34.4	30.4	18.9	10.3	8.1	16.3	1.6
Select red oaks	71.9	2.5	3.0	8.0	10.2	8.2	9.6	14.6	5.4	8.8	1.8
Other white oaks	128.9	9.9	18.8	24.9	17.0	19.1	13.0	14.2	5.1	5.5	1.4
Other red oaks	508.4	33.4	69.4	80.3	69.7	73.0	54.2	48.2	30.2	43.7	6.4
Other hickories	156.5	12.3	22.5	27.6	23.0	22.0	23.6	11.6	7.0	6.9	...
Persimmon	2.4	1.7	0.1	...	0.6	...	...	...	...	...	...
Hard maple	0.3	...	0.3	...	...	...	...	...	...	...	...
Soft maple	58.9	13.8	8.0	16.3	4.5	4.6	5.3	2.7	0.8	2.0	1.0
Boxelder	1.2	...	0.4	...	...	0.3	...	0.5	...	...	...
Beech	15.4	1.1	2.0	...	1.4	1.4	1.2	3.3	1.4	3.5	...
Sweetgum	354.1	43.2	57.8	78.5	54.2	43.7	32.6	16.0	15.3	12.1	0.6
Blackgum	101.0	9.7	14.8	22.4	15.3	17.5	10.4	1.7	3.0	6.2	...
Other gums/tupelos	107.3	8.4	14.8	26.3	20.2	17.6	9.1	4.9	1.6	2.9	1.5
White ash	2.9	0.6	0.5	0.3	...	0.5	0.5	0.5	...	...	...
Other ashes	27.8	1.8	1.9	1.2	3.7	5.6	3.6	5.6	1.9	2.5	...
Sycamore	7.4	...	...	0.2	0.8	...	1.5	1.4	0.7	1.3	1.5
Basswood	0.6	...	...	...	0.6	...	...	...	...	...	...
Yellow-poplar	153.5	7.0	11.9	13.3	24.6	29.5	19.5	17.0	13.1	16.9	0.6
Magnolia	0.3	...	...	...	...	...	...	0.3	...	...	...
Sweetbay	34.4	5.4	7.9	7.3	5.1	4.4	1.5	2.8	...	0.2	...
Willow	4.9	...	1.2	1.8	...	1.9	...	...	...	...	...
Black cherry	7.8	1.5	3.0	2.8	0.4	...	...	...	...	...	...
American elm	7.5	0.6	0.8	1.1	1.1	0.9	...	0.6	1.1	1.3	...
Other elms	17.1	2.0	3.4	2.1	5.3	2.6	1.1	...	0.6	...	...
River birch	23.2	3.2	1.3	4.0	3.3	3.4	2.1	2.0	0.8	3.2	...
Hackberry	36.6	1.4	3.2	4.0	3.1	5.5	5.2	4.1	4.2	5.2	0.5
Black locust	0.3	0.1	0.2	...	...	...	...	...	...	...	...
Other locusts	2.1	...	0.7	...	0.6	0.6	0.3	...	...	...	...
Sassafras	1.4	1.4	...	...	...	...	...	...	...	...	...
Dogwood	3.7	3.4	0.3	...	...	...	...	...	...	...	...
Holly	1.3	0.1	0.3	0.9	...	...	...	...	...	...	...
Other commercial	2.7	0.9	0.3	...	0.6	...	0.4	...	0.5	...	...
Total hardwoods	2033.0	183.7	272.3	353.0	298.8	292.9	213.9	161.7	101.4	138.5	16.9
All species	3620.8	344.7	535.7	650.9	579.9	523.5	367.1	238.2	145.5	210.9	24.5

Table 35—*Volume of growing stock in the saw-log portion of sawtimber trees on timberland by detailed species and diameter class, West-Central Alabama Counties, 1990*

Species	All classes	Diameter class (inches at breast height)							
		9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>----- Million cubic feet -----</i>									
Longleaf pine	52.3	8.8	11.5	14.2	10.3	5.0	1.4	1.2	...
Slash pine	1.0	0.4	...	0.6	...	...	...	...	...
Shortleaf pine	157.7	42.2	43.5	38.5	20.2	7.7	2.1	3.4	...
Loblolly pine	721.9	150.4	170.9	141.8	105.7	55.0	35.2	59.4	3.6
Virginia pine	64.7	29.0	19.9	12.4	2.8	0.5	...	...	...
Spruce pine	3.6	0.2	...	1.5	...	0.9	...	1.0	...
Redcedar	1.8	0.7	...	0.3	0.2	0.3	0.2	...	...
Hemlock-spruce	0.5	...	0.5	...	...	...	...	...	...
Cypress	13.7	1.5	1.9	0.4	1.5	1.1	1.6	2.0	3.6
Total softwoods	1017.2	233.2	248.3	209.7	140.8	70.6	40.5	66.9	7.2
Select white oaks	95.2	...	25.0	24.6	15.4	8.4	6.7	13.8	1.3
Select red oaks	49.8	...	7.7	6.8	8.5	12.7	4.6	7.9	1.7
Other white oaks	60.4	...	12.8	15.3	10.6	11.7	4.2	4.5	1.2
Other red oaks	266.3	...	50.5	59.5	46.9	41.3	25.8	37.0	5.3
Other hickories	76.3	...	17.4	17.3	20.0	9.7	5.9	6.0	...
Persimmon	0.4	...	...	0.4	...	...	...	...	...
Soft maple	16.5	...	3.4	3.6	4.2	2.2	0.5	1.8	0.9
Boxelder	0.7	...	...	...	0.3	...	0.4	...	...
Beech	9.8	...	0.8	1.3	1.0	2.9	1.1	2.8	...
Sweetgum	140.4	...	38.8	35.0	28.2	13.7	13.4	10.7	0.5
Blackgum	44.1	...	10.8	14.3	9.3	1.5	2.6	5.6	...
Other gums/tupelos	44.2	...	13.4	13.1	7.5	4.3	1.6	2.6	1.5
White ash	1.3	...	...	0.5	0.4	0.4	...	...	...
Other ashes	19.7	...	2.8	4.7	3.3	4.8	1.9	2.3	...
Sycamore	6.3	...	0.7	...	1.1	1.3	0.6	1.2	1.5
Basswood	0.4	...	0.4	...	...	...	...	...	...
Yellow-poplar	102.0	...	17.2	24.5	17.1	15.1	11.8	15.6	0.6
Magnolia	0.3	...	...	...	...	0.3	...	...	...
Sweetbay	10.9	...	3.5	3.7	1.2	2.2	...	0.2	...
Willow	1.4	...	...	1.4	...	...	...	...	...
Black cherry	0.4	...	0.4	...	...	...	...	...	...
American elm	4.5	...	0.8	0.9	...	0.4	1.0	1.2	...
Other elms	7.6	...	4.1	1.9	1.0	...	0.6	...	...
River birch	12.4	...	2.4	2.8	1.9	1.7	0.7	2.9	...
Hackberry	22.8	...	2.2	4.3	4.3	3.6	3.5	4.4	0.5
Other locusts	1.0	...	0.3	0.4	0.2	...	...	...	...
Other commercial	1.4	...	0.5	...	0.3	...	0.5	...	...
Total hardwoods	996.4	...	215.9	236.3	182.9	138.3	87.4	120.5	15.0
All species	2013.6	233.2	464.2	446.0	323.7	208.9	128.0	187.4	22.1

Table 36—*Volume of timber on timberland by species and class of timber, West-Central Alabama Counties, 1990*

Species	All live	Growing stock	Rough	Rotten
<i>- - - - - Million cubic feet - - - - -</i>				
Longleaf pine	67.8	67.8	0.1	...
Slash pine	2.6	2.6	...	...
Shortleaf pine	246.0	241.9	3.7	0.3
Loblolly pine	1125.7	1114.7	11.0	...
Virginia pine	136.3	135.3	1.0	...
Spruce pine	3.9	3.9	...	...
Redcedar	5.9	5.2	0.4	0.3
Hemlock-spruce	1.0	1.0	...	...
Cypress	15.7	15.5	0.2	...
Total softwoods	1604.9	1587.8	16.5	0.6
Select white oaks	198.5	191.3	4.6	2.6
Select red oaks	74.8	71.9	1.1	1.8
Other white oaks	143.8	128.9	12.3	2.5
Other red oaks	539.0	508.4	26.1	4.5
Water hickory	0.7	...	0.7	...
Other hickories	167.8	156.5	9.3	1.9
Persimmon	2.5	2.4	0.1	...
Hard maple	0.5	0.3	0.2	...
Soft maple	73.2	58.9	12.4	1.9
Boxelder	1.4	1.2	0.2	...
Beech	22.1	15.4	4.2	2.5
Sweetgum	374.8	354.1	15.5	5.2
Blackgum	113.4	101.0	10.7	1.6
Other gums/tupelos	116.8	107.3	7.6	1.9
White ash	2.9	2.9	...	...
Other ashes	30.6	27.8	2.7	0.1
Sycamore	7.4	7.4	...	...
Basswood	0.6	0.6	...	...
Yellow-poplar	160.1	153.5	3.3	3.3
Magnolia	1.2	0.3	0.9	...
Sweetbay	42.2	34.4	3.2	4.5
Willow	4.9	4.9	...	...
Black cherry	8.1	7.8	0.2	0.1
American elm	9.6	7.5	1.5	0.6
Other elms	18.9	17.1	1.8	...
River birch	24.5	23.2	1.0	0.3
Hackberry	41.2	36.6	3.5	1.2
Black locust	0.3	0.3	...	...
Other locusts	2.3	2.1	0.2	...
Sassafras	1.9	1.4	0.4	0.1
Dogwood	7.1	3.7	3.4	...
Holly	1.4	1.3	0.1	...
Other commercial	4.0	2.7	1.3	...
Total hardwoods	2198.4	2033.0	128.6	36.8
Noncommercial	67.9	...	67.9	...
All species	3871.1	3620.8	212.9	37.4

Table 37—Volume of sawtimber for tree grade 1 on timberland by detailed species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
<i>- - - - - Million board feet - - - - -</i>									
Longleaf pine	50.7	8.6	3.3	10.9	13.3	5.6	1.4	7.5	...
Shortleaf pine	418.0	87.5	97.0	125.6	64.7	29.7	9.4	4.1	...
Loblolly pine	1110.8	116.8	217.4	190.1	191.9	135.0	66.4	188.9	4.4
Virginia pine	17.4	4.8	6.0	3.3	3.2	...	...	...	...
Redcedar	8.9	3.4	...	1.6	1.1	1.5	1.3	...	...
Cypress	29.3	...	...	...	3.1	3.6	4.3	8.4	9.8
Total softwoods	1635.1	221.1	323.7	331.5	277.4	175.4	82.8	209.0	14.2
Select white oaks	58.4	...	...	...	9.2	10.3	8.6	30.4	...
Select red oaks	92.0	...	...	...	10.3	29.4	17.9	34.4	...
Other white oaks	28.0	...	...	...	10.8	7.5	1.2	8.6	...
Other red oaks	127.4	...	...	...	9.1	45.3	43.7	29.3	...
Other hickories	42.6	...	...	...	3.5	18.3	14.6	6.3	...
Boxelder	3.0	...	...	...	...	...	3.0	...	...
Sweetgum	98.2	...	...	...	21.4	25.3	23.5	28.0	...
Blackgum	8.1	...	...	...	2.2	1.4	2.5	2.0	...
Other gums/tupelos	14.3	...	...	...	5.2	4.0	...	5.0	...
Other ashes	18.0	...	...	...	...	6.7	8.3	3.1	...
Sycamore	5.6	...	...	...	...	5.6	...	...	...
Yellow-poplar	53.3	...	...	...	9.0	12.6	19.9	11.9	...
American elm	8.0	...	...	...	...	...	3.4	4.6	...
Hackberry	30.8	...	...	...	15.2	6.7	2.9	6.0	...
Total hardwoods	587.8	...	...	...	95.9	173.0	149.3	169.6	...
All species	2222.9	221.1	323.7	331.5	373.3	348.4	232.1	378.5	14.2

Table 38 – Volume of sawtimber for tree grade 2 on timberland by detailed species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)							
		9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>Million board feet</i>									
Longleaf pine	86.6	11.2	18.9	27.9	14.5	12.0	2.1	...	...
Slash pine	3.3	...	...	3.3	...	...	...	...	...
Shortleaf pine	147.0	26.6	42.1	37.2	37.4	3.7	...	...	...
Loblolly pine	795.4	100.9	149.3	172.7	144.9	45.4	61.3	113.0	7.9
Virginia pine	48.4	16.3	16.5	15.6	...	...	...	...	...
Cypress	14.6	...	4.3	1.8	1.2	...	4.6	2.6	...
Total softwoods	1095.4	155.1	231.2	258.5	198.1	61.0	68.0	115.6	7.9
Select white oaks	132.0	...	...	30.1	46.7	18.3	17.2	15.4	4.3
Select red oaks	67.1	...	...	8.6	12.4	28.0	7.7	2.3	8.0
Other white oaks	50.7	...	...	6.2	11.2	24.4	4.9	4.0	...
Other red oaks	244.2	...	...	44.8	55.2	58.7	23.7	50.2	11.6
Other hickories	86.7	...	...	24.7	37.8	15.1	1.9	7.1	...
Soft maple	5.4	...	...	...	5.4	...	...	...	...
Boxelder	1.9	...	...	...	1.9	...	...	...	...
Beech	7.2	...	...	...	...	2.9	...	4.2	...
Sweetgum	156.9	...	...	70.7	38.9	20.3	11.0	13.2	2.8
Blackgum	64.9	...	...	32.9	16.8	...	7.6	7.7	...
Other gums/tupelos	56.5	...	...	30.2	13.6	9.2	3.6	...	...
Other ashes	29.6	...	...	16.3	7.2	...	3.0	3.1	...
Sycamore	13.1	...	...	...	2.7	...	...	...	10.4
Yellow-poplar	119.0	...	...	37.7	24.7	24.2	13.3	19.0	...
Magnolia	1.2	...	...	...	...	1.2	...	...	...
Sweetbay	5.0	...	...	3.2	...	1.8	...	...	...
American elm	1.5	...	...	...	...	1.5	...	...	...
Other elms	2.9	...	...	...	2.9	...	...	...	...
River birch	11.4	...	...	5.2	3.5	2.8	...	...	...
Hackberry	27.5	...	...	10.4	3.2	5.2	4.1	4.6	...
Total hardwoods	1084.8	...	...	321.1	284.0	213.7	98.1	130.7	37.2
All species	2180.2	155.1	231.2	579.6	482.1	274.7	166.1	246.3	45.0

Table 39—Volume of sawtimber for tree grade 3 on timberland by detailed species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)							
		9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>- - - - - Million board feet - - - - -</i>									
Longleaf pine	172.0	28.1	44.2	46.7	34.5	15.0	3.5	...	...
Slash pine	2.4	2.4	...	...	...	...	...	...	...
Shortleaf pine	371.7	115.8	111.2	80.5	27.9	16.4	4.3	15.5	...
Loblolly pine	2351.2	577.1	627.4	481.9	310.5	152.5	96.7	92.5	12.5
Virginia pine	276.0	129.2	86.8	46.4	10.4	3.1	...	...	...
Spruce pine	23.6	1.1	...	9.7	...	6.1	...	6.7	...
Hemlock-spruce	2.9	...	2.9	...	...	...	...	...	...
Cypress	31.7	8.3	5.6	...	4.7	2.5	...	...	10.6
Total softwoods	3231.5	862.2	878.2	665.2	388.0	195.6	104.5	114.7	23.1
Select white oaks	252.4	...	95.7	77.3	25.6	18.4	10.6	24.8	...
Select red oaks	68.6	...	28.4	10.8	9.4	14.3	...	5.7	...
Other white oaks	194.6	...	49.5	58.9	24.1	32.2	10.2	11.3	8.4
Other red oaks	501.9	...	123.6	120.2	64.6	67.5	48.2	66.1	11.7
Other hickories	213.6	...	60.0	45.9	62.6	30.4	6.7	8.0	...
Persimmon	2.4	...	...	2.4	...	...	...	...	...
Soft maple	35.3	...	3.6	8.2	2.5	8.4	2.0	7.7	2.9
Beech	16.3	...	...	...	...	6.5	2.6	7.1	...
Sweetgum	430.9	...	174.2	103.3	73.9	24.1	33.6	21.8	...
Blackgum	121.7	...	49.7	40.1	22.4	...	...	9.5	...
Other gums/tupelos	114.4	...	62.0	25.2	12.5	6.8	4.6	2.3	0.9
White ash	7.0	...	...	2.7	1.6	2.6	...	...	...
Other ashes	51.9	...	10.5	12.5	9.4	12.1	...	7.4	...
Sycamore	14.0	...	4.0	...	1.4	...	3.4	5.2	...
Basswood	2.1	...	2.1	...	...	...	...	...	...
Yellow-poplar	192.3	...	64.0	57.8	23.2	21.6	5.4	16.4	3.8
Sweetbay	18.3	...	5.4	9.3	3.6	...	...	...	...
Willow	3.9	...	...	3.9	...	...	...	...	...
Black cherry	2.0	...	2.0	...	...	...	...	...	...
American elm	9.0	...	4.6	...	...	1.1	3.3	...	...
Other elms	26.2	...	16.4	6.4	3.4	...	...	...	...
River birch	41.2	...	7.9	5.2	5.2	4.7	1.5	16.8	...
Hackberry	35.0	...	4.5	11.4	...	6.8	7.9	4.4	...
Other locusts	5.1	...	1.6	2.3	1.2	...	...	...	...
Other commercial	3.3	...	1.3	...	2.0	...	...	...	...
Total hardwoods	2363.5	...	771.1	603.9	348.7	257.5	139.9	214.6	27.7
All species	5594.9	862.2	1649.3	1269.1	736.7	453.1	244.4	329.3	50.8

Table 40 — Volume of sawtimber for tree grade 4 on timberland by detailed species and diameter class, West-Central Alabama Counties, 1990

Species	All classes	Diameter class (inches at breast height)							
		9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
<i>Million board feet</i>									
Select white oaks	84.6	...	38.0	31.2	6.9	...	...	8.6	...
Select red oaks	57.2	...	15.8	18.3	12.5	8.4	2.1	...	...
Other white oaks	59.1	...	16.8	13.8	13.3	9.8	5.4	...	...
Other red oaks	590.9	...	134.9	157.1	117.3	68.8	39.3	69.1	4.5
Other hickories	92.8	...	32.0	27.9	14.8	...	8.3	9.8	...
Soft maple	40.8	...	12.7	8.7	15.4	2.1	...	2.0	...
Beech	32.4	...	3.9	5.6	5.7	9.0	2.1	6.1	...
Sweetgum	108.6	...	40.0	18.3	25.6	11.7	13.0	...	...
Blackgum	15.2	...	6.5	6.5	...	...	2.2	...	...
Other gums/tupelos	5.8	...	...	4.2	1.7	...	...	...	...
Other ashes	13.2	...	2.6	...	2.4	8.2	...	...	...
Sycamore	2.6	...	...	...	...	2.6	...	...	...
Yellow-poplar	192.1	...	30.1	48.8	35.0	23.8	20.4	34.0	...
Sweetbay	31.6	...	14.3	3.4	1.7	11.1	...	1.1	...
Willow	3.1	...	...	3.1	...	...	...	...	...
American elm	8.3	...	...	5.3	...	...	...	3.0	...
Other elms	6.4	...	4.6	1.8	...	...	...	...	...
River birch	11.5	...	2.0	2.8	2.3	2.6	...	1.8	...
Hackberry	22.0	...	4.2	...	2.4	...	2.9	12.5	...
Other commercial	1.7	...	1.7	...	...	...	...	...	...
Total hardwoods	1380.0	...	360.1	356.7	256.9	158.1	95.7	148.0	4.5
All species	1380.0	...	360.1	356.7	256.9	158.1	95.7	148.0	4.5

Table 41 — Volume of sawtimber on timberland by species and ownership class, West-Central Alabama Counties, 1990

Species	All ownerships	National forest	Other public	Forest industry	Forest industry-leased		Other private
					Forest industry-leased	Other private	
<i>Million board feet</i>							
Yellow pines	5971.8	570.5	42.4	1410.2	251.1	3697.6	
Cypress	75.6	...	...	10.5	...	65.1	
Redcedar	8.9	...	...	3.0	...	6.0	
Other softwoods	2.9	...	...	2.9	...	...	
Total softwoods	6059.2	570.5	42.4	1426.5	251.1	3768.7	
Select white-red oaks	846.9	33.1	12.2	121.9	12.9	666.8	
Other white-red oaks	1932.3	54.2	14.9	360.2	71.2	1431.8	
Hickory	459.7	19.3	13.9	72.4	11.6	342.5	
Sweetgum	833.5	48.8	7.2	233.3	27.1	517.0	
Tupelo and blackgum	450.8	25.5	...	38.6	8.0	378.7	
Ash-walnut-black cherry	128.5	...	...	32.4	3.0	93.0	
Yellow-poplar	601.3	55.1	14.0	96.7	25.1	410.4	
Other hardwoods	560.0	8.4	24.6	111.7	11.2	404.0	
Total hardwoods	5812.9	244.3	86.8	1067.2	170.2	4244.3	
All species	11872.1	814.8	129.3	2493.7	421.4	8012.9	

Table 42—Average net annual growth, average annual removals, and average annual mortality of live trees <sup>1</sup> by county and species group, West-Central Alabama Counties, 1990

County	Growth			Removals			Mortality		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood	All species	Softwood	Hardwood
<i>Million cubic feet</i>									
Bibb	16.9	10.1	6.8	18.8	13.2	5.6	4.1	1.5	2.5
Fayette	17.6	5.5	12.1	26.1	10.4	15.7	3.8	1.4	2.4
Greene	16.1	5.9	10.2	11.9	8.5	3.4	4.1	1.4	2.7
Hale	13.8	5.3	8.5	19.2	10.0	9.2	2.9	1.9	1.0
Lamar	16.0	6.6	9.4	13.5	7.2	6.3	7.2	1.4	5.8
Marion	17.9	8.0	9.8	19.8	13.6	6.2	7.4	4.6	2.8
Perry	19.0	11.4	7.6	22.3	14.5	7.9	5.0	2.0	3.0
Pickens	36.4	19.9	16.5	27.9	18.4	9.5	12.0	6.5	5.5
Tuscaloosa	36.5	22.9	13.6	61.5	41.0	20.5	10.2	3.5	6.7
All counties	190.1	95.6	94.5	220.9	136.6	84.3	56.6	24.2	32.4

<sup>1</sup>Excludes trees less than 5.0 inches in diameter at breast height.

Table 43—Average net annual growth, average annual removals, and average annual mortality of live trees <sup>1</sup> by ownership class and species group, West-Central Alabama Counties, 1990

Ownership class	Growth			Removals			Mortality		
	All classes	Softwood	Hardwood	All species	Softwood	Hardwood	All Species	Softwood	Hardwood
<i>Million cubic feet</i>									
National forest	5.7	3.4	2.3	5.5	5.0	0.5	2.0	1.2	0.8
Other public	1.3	0.2	1.1	2.5	2.1	0.3	0.3	...	0.3
Forest industry	48.1	30.7	17.4	75.6	49.8	25.7	16.1	8.3	7.8
Forest industry-leased	6.2	2.9	3.3	10.3	6.5	3.8	1.5	0.9	0.7
Other private	128.8	58.3	70.4	127.1	73.2	53.9	36.7	13.9	22.9
All ownerships	190.1	95.6	94.5	220.9	136.6	84.3	56.6	24.2	32.4

<sup>1</sup>Excludes trees less than 5.0 inches in diameter at breast height.

## FIGURES

THOUSAND ACRES

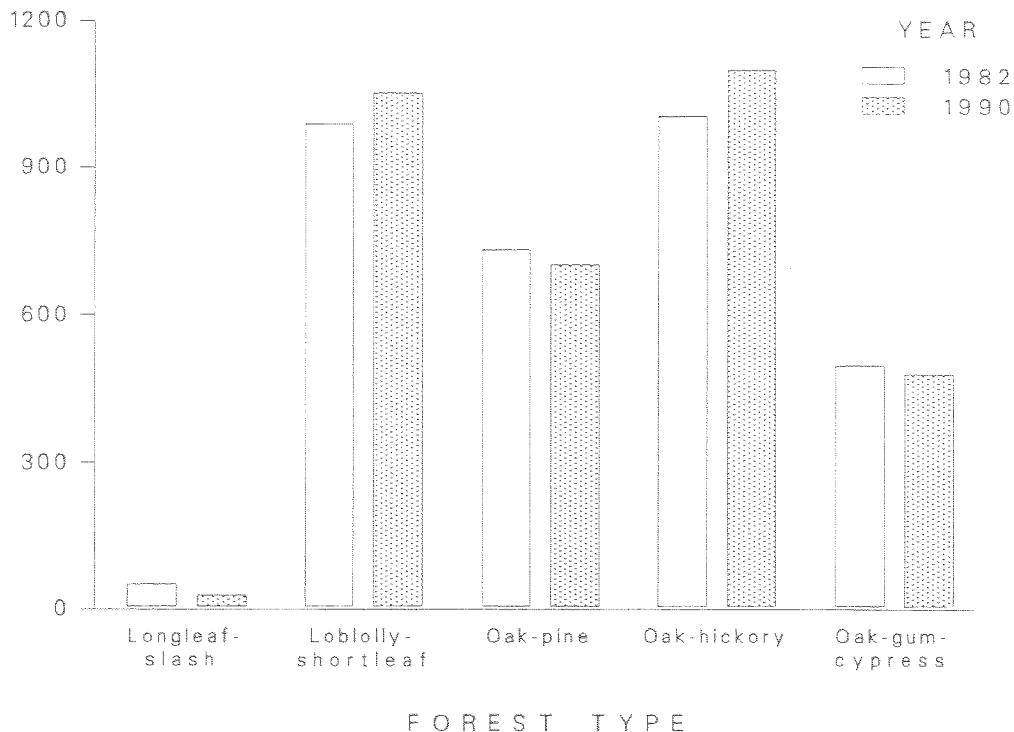


Figure 1.—*Area of timberland by forest type, West-Central Alabama, 1982 and 1990.*

THOUSAND ACRES

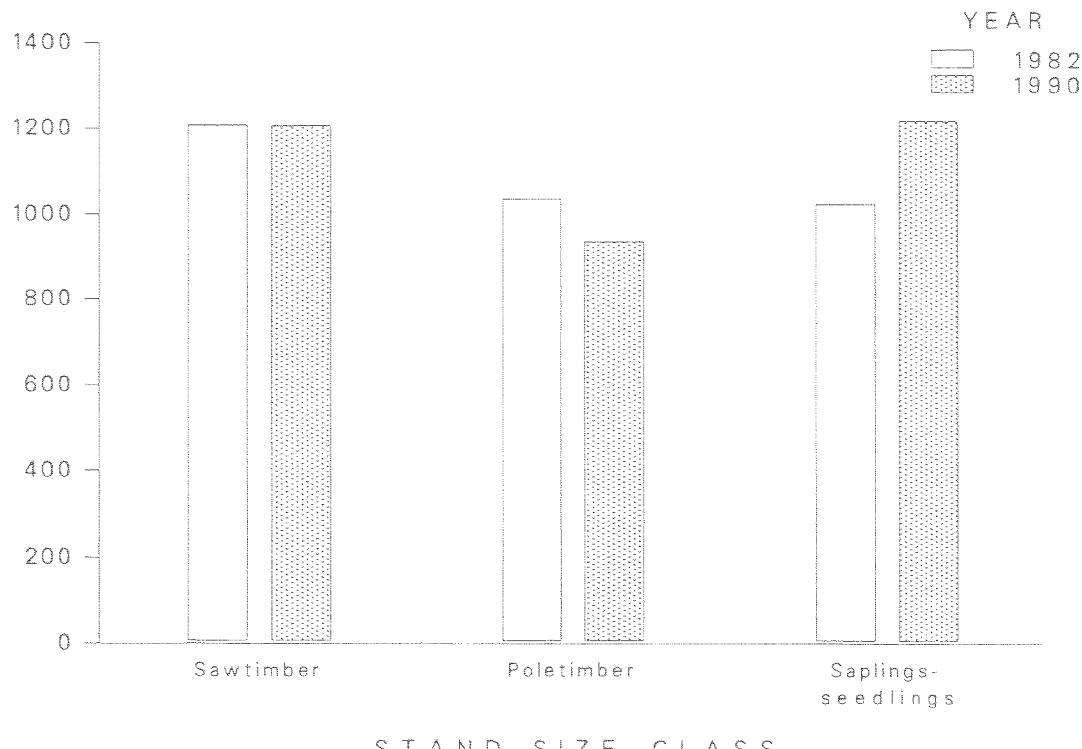
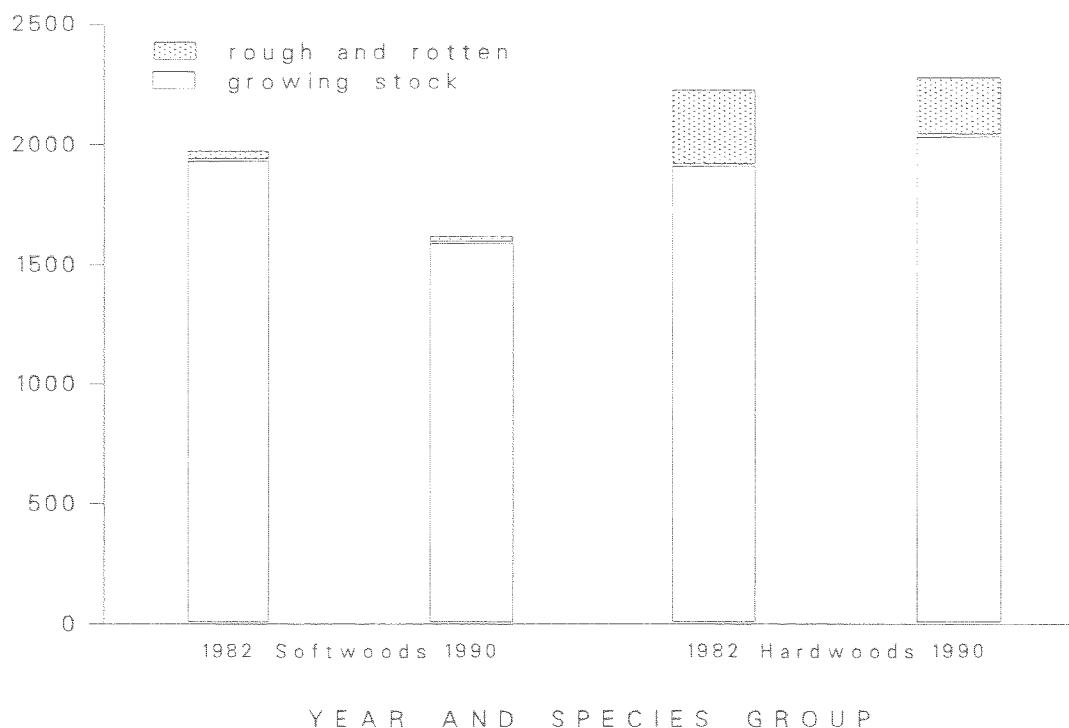


Figure 2.—*Area of timberland by stand-size class, West-Central Alabama, 1982 and 1990.*

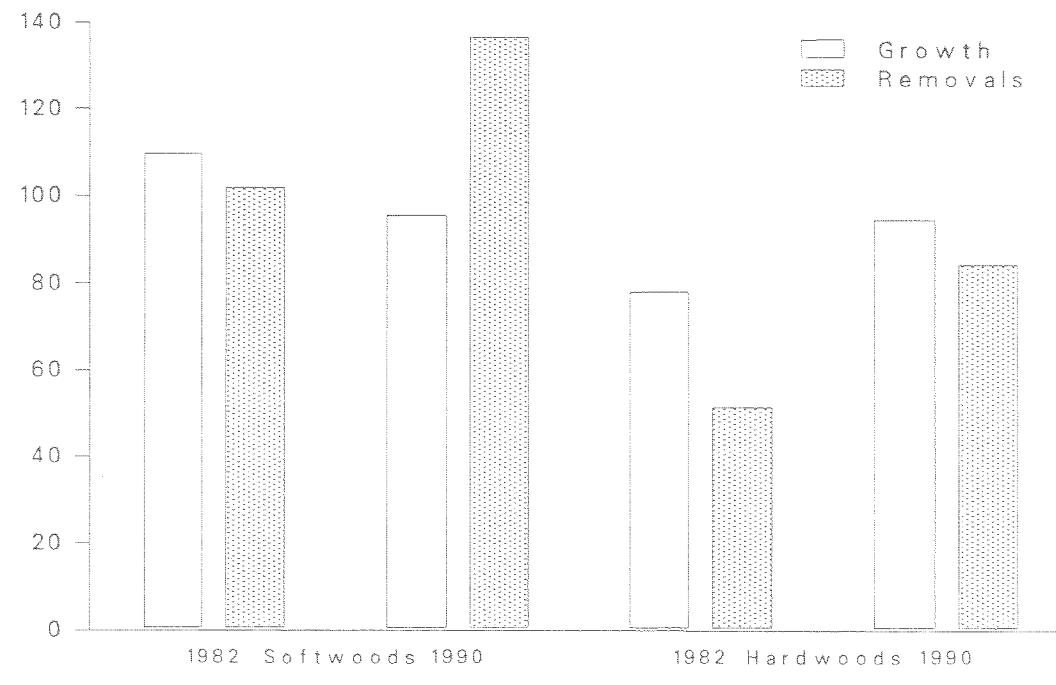
MILLION CUBIC FEET



YEAR AND SPECIES GROUP

Figure 3.—*Volume of live trees on timberland by species group and class of timber, West-Central Alabama, 1982 and 1990.*

MILLION CUBIC FEET



YEAR AND SPECIES GROUP

Figure 4.—*Average net annual growth and average annual removals of live trees on timberland by species group, West-Central Alabama, 1982 and 1990.*

MILLION CUBIC FEET

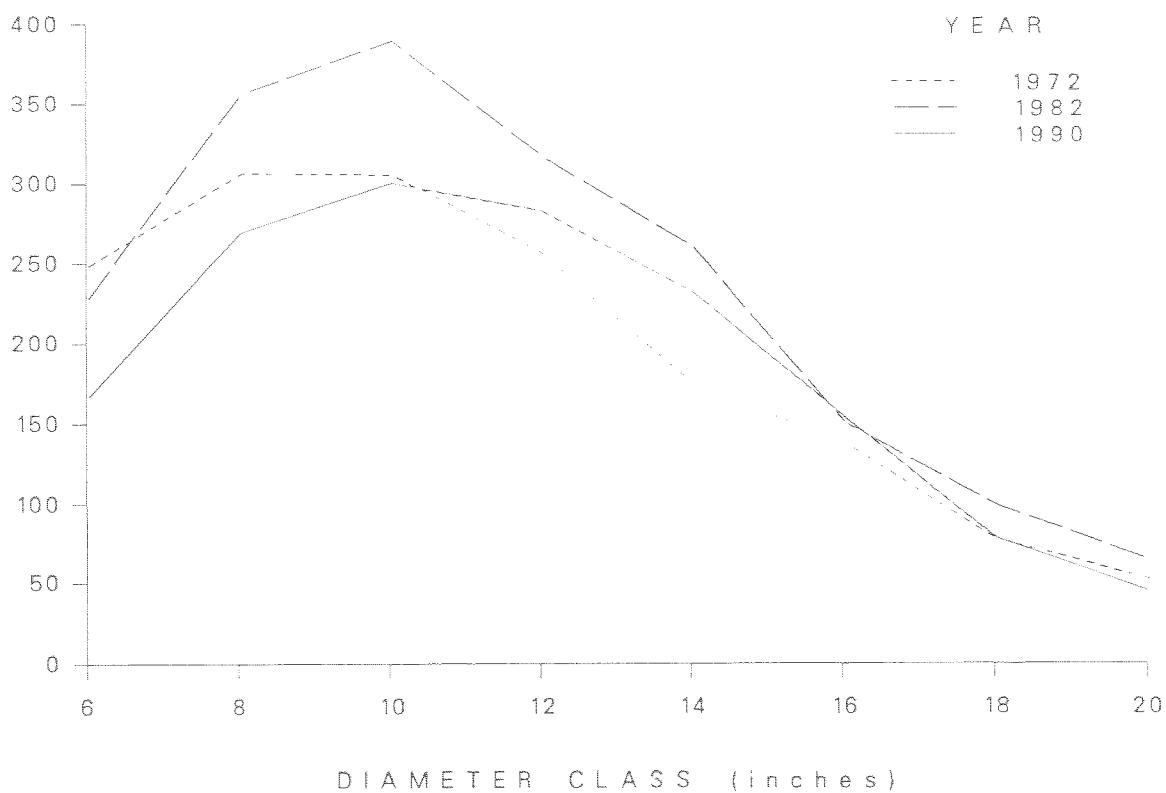


Figure 5.—Volume of live softwood trees on timberland by diameter class, West-Central Alabama, 1972, 1982 and 1990.

MILLION CUBIC FEET

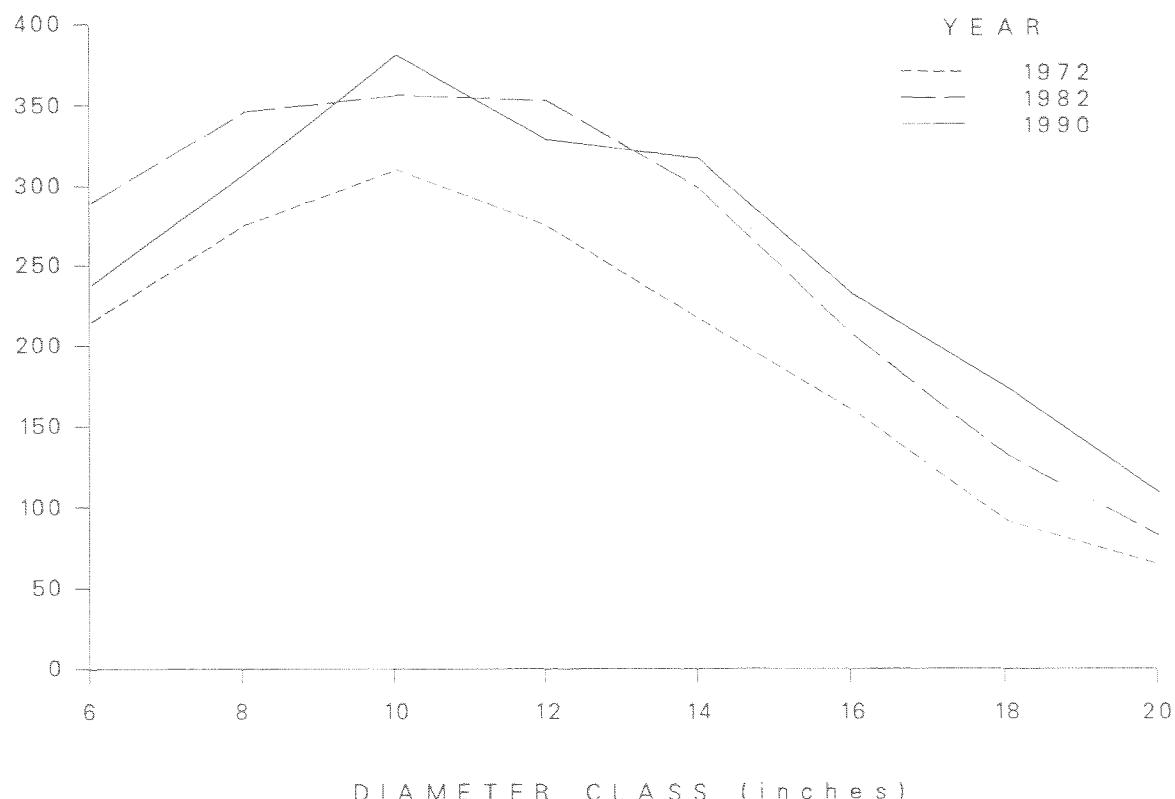


Figure 6.—Volume of live hardwood trees on timberland by diameter class, West-Central Alabama, 1972, 1982 and 1990.

MILLION TREES

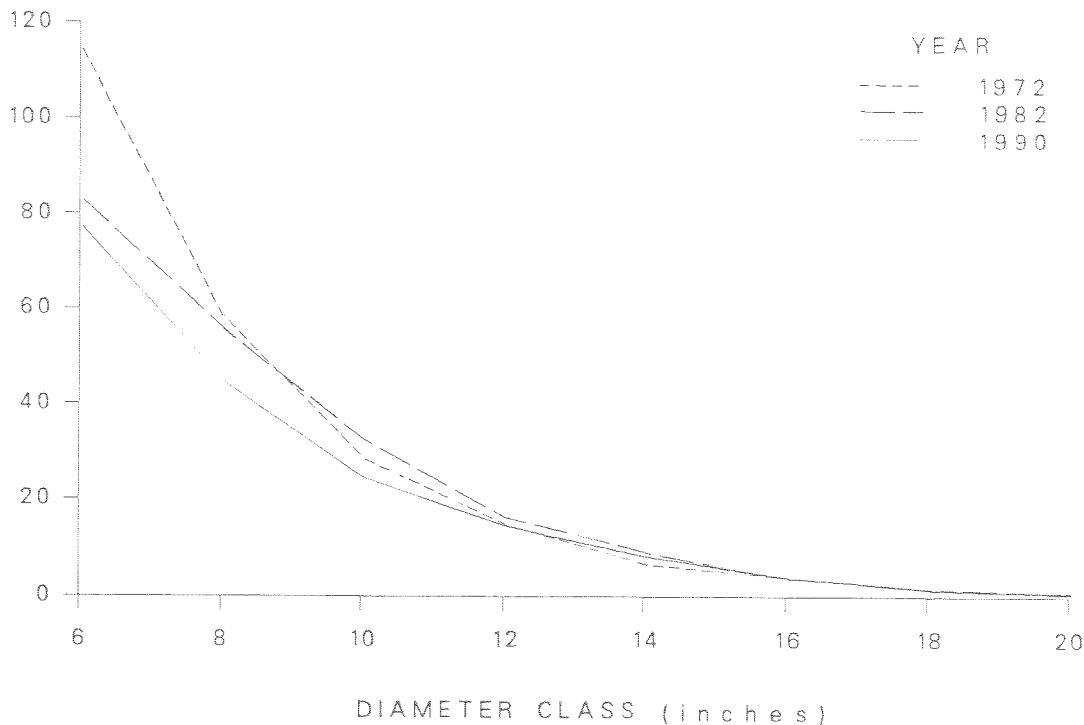


Figure 7.—Number of live softwood trees on timberland by diameter class, West-Central Alabama, 1972, 1982, and 1990.

MILLION TREES

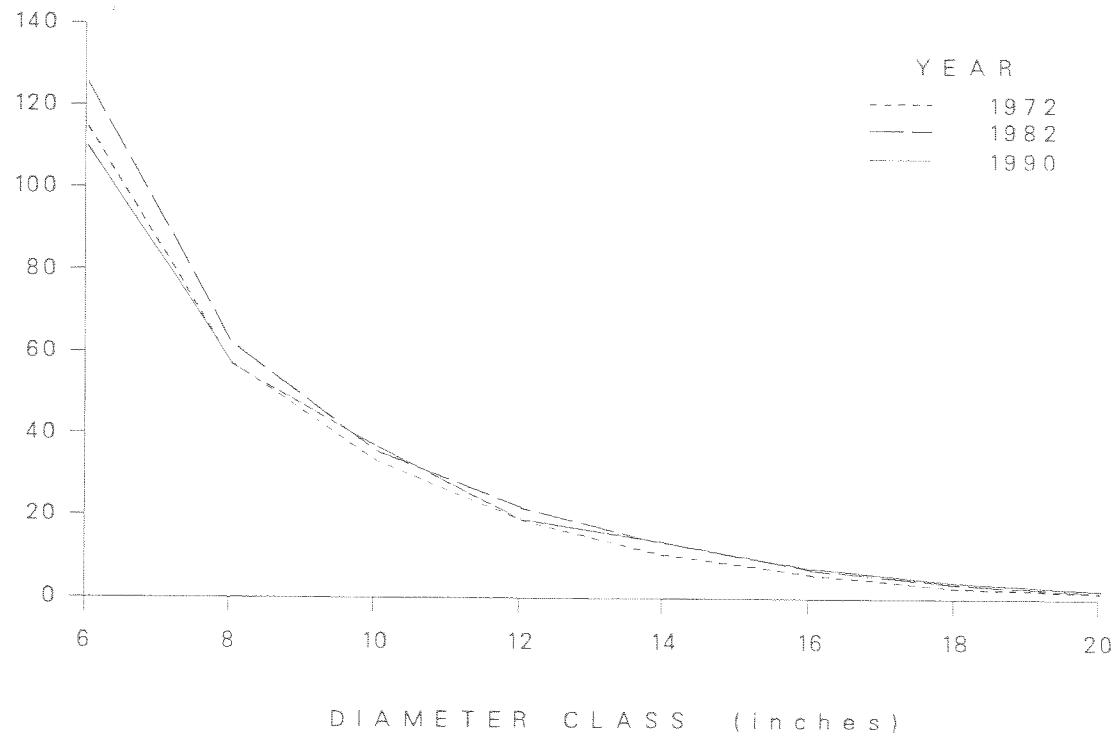


Figure 8.—Number of live hardwood trees on timberland by diameter class, West-Central Alabama, 1972, 1982, and 1990.

McWilliams, William H.; Duncan, K. L.; Vissage, John S. 1990. Forest Statistics for West-Central Alabama Counties—1990. Resour. Bull. SO-150. New Orleans, LA: U. S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 30p.

Tabulates forest resource information from a new inventory of the West-Central Counties of Alabama.

**Additional Keywords:** Area, volume, forest type, stand size, and ownership.